INDIA
IN
1928-29

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(2) "Iranian Influence on Moslem Literature", from the Russian of Inostramzev;

(3) "Priyadarsika", jointly with Jackson and Ogde

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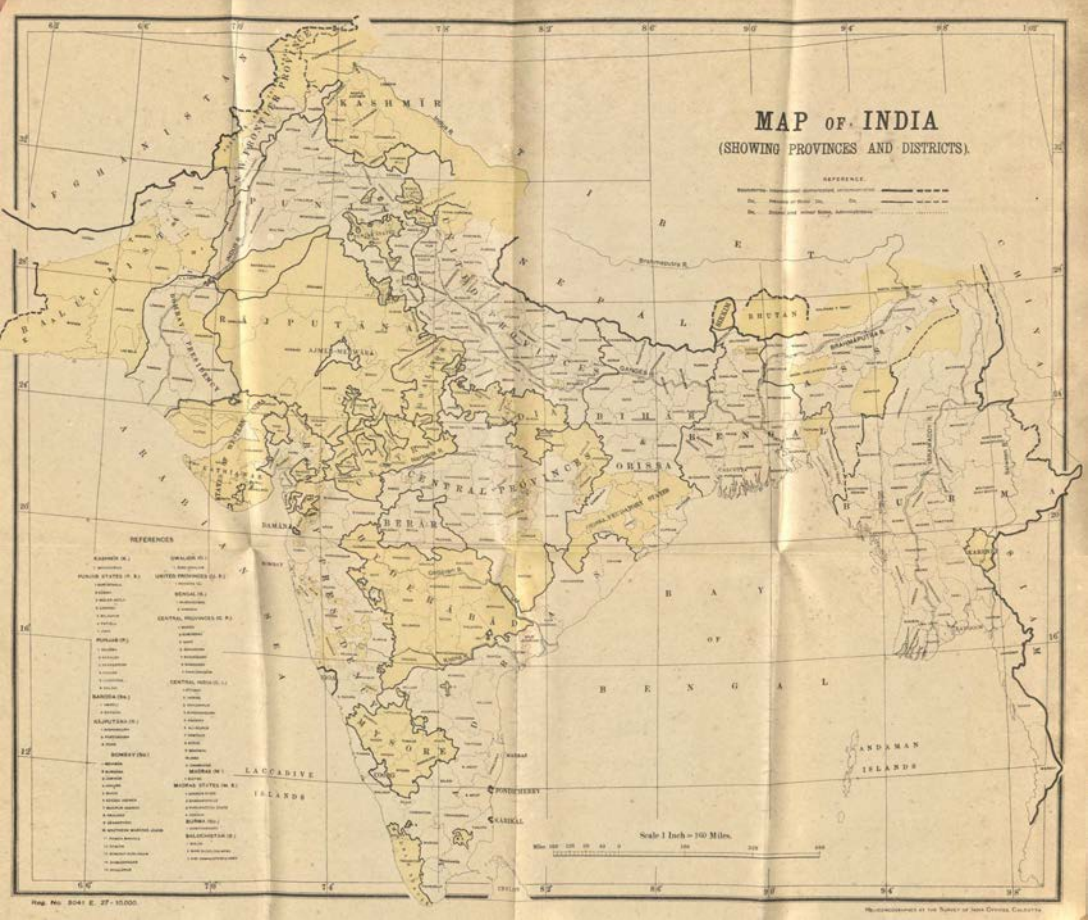
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MYSORE
BURMA
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IN

1928-29

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Director of Public Information, Government of India.

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INDIA IN 1928-29.

CHAPTER I.

The Year 1928-29.

Just as the chronicle of last year's events in India began with the statement that the appointment of the Indian Statutory Commission was the most important happening of the year, so the present narrative begins with the statement that the issues with which the Commission are concerned were the centre of political interest during the year now under review. During this period the Commission completed a very important part of its enquiry, namely, that part which had to be carried out in India itself. During the course of their tour Sir John Simon and his colleagues visited every province and obtained material which will enable them to study from every point of view the problems on which they have to report.

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Readers of the preceding volumes of this report will remember that for a few years past the relations between the two great communities in this country, the Hindus and the Muhammadans, have been one of the unsatisfactory features in the public life of this country. Fortunately, this report was able to record last year that the six months ending with March 31st, 1928, had been almost free from violent clashes between partisan groups, and, but for the riots which broke out in Bombay on the 2nd of February and extended for about a fortnight, it would have been possible to claim for the twelve months under review a continued improvement in this respect. It is true that certain affairs in the Punjab and in Bengal showed that the old fire was dormant and not dead, but, nevertheless, until the Bombay out-break the decrease, both in the number of Hindu-Muslim riots and in the consequent

casualties, showed a welcome contrast to the experience of the years immediately preceding.

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Various reasons were given in last year's report for this fortunate circumstance and these have continued to work during the period under review. As was pointed out in last year's report, the better elements on both sides have begun to revolt against the injury and the disgrace inflicted upon Indian public life by these savage and senseless outbreaks, and His Excellency Lord Irwin, by his speeches to the Central Legislature and outside the walls of the latter, has given a strong impetus to the attempts, which, as we shall see in the next chapter, have been continuously proceeding since the latter half of 1927, to find some basis for agreement between the two great communities on those questions of political importance which are at least contributory causes of the strained relations between them. Again, the issues arising out of the Statutory Commission's enquiry have, to a large extent, absorbed the energy and attention of the different communities, with the result that less importance has been attached to local causes of conflict, and more importance to the broad question of constitutional policy. Moreover, the legislation passed during the autumn session of the Indian Legislature in 1927 penalising the instigation of inter-communal hostility by the press, had some effect in improving the inter-communal position, although some vernacular newspapers, particularly in the Bombay Presidency, have not been able to resist the temptation of dwelling on communal subjects. The number of riots during the twelve months ending with March 31st, 1929, is comparatively small—it is no more than 22—but unfortunately the casualties, which were swelled heavily by the Bombay riots, are very serious, no fewer than 204 persons having been killed and nearly a thousand injured. Of these, the fortnight's rioting in Bombay accounts for 149 killed and 739 injured. It is true that these figures are better than those which His Excellency Lord Irwin gave to the members of the Central Legislature when he addressed them on August the 29th, 1927, and told them that in less than 18 months, between 250 and 300 persons had been killed in Hindu-Muslim riots, and over 2,500 injured, but, nevertheless, they are an index to the human suffering, social upheaval and economic loss, which are the natural results of these outbursts. Seven of these twenty-two riots, or roughly one-

third of them, occurred on the day of the celebration of the annual Muhammadan festival of Bakr 'Id at the end of May. The celebration of this festival is always a dangerous time in Hindu-Muslim relations, because part of the ceremony consists in animal sacrifice, and when cows are the animals chosen, the slightest tension between Hindus and Muslims is apt to produce an explosion. Of the Bakr 'Id riots only two were serious and both of them took place in the Punjab. In a village of the Ambala District ten people were killed and nine injured in a riot, whilst the other riot referred to here, that which took place in Softa village of the Gurgaon District in the Southern Punjab, attained considerable notoriety because of its sensational features and the very grave consequences which might have arisen had it not been for the prompt and courageous action of the District Police. The village of Softa is about 27 miles south of Delhi, and is inhabited by Muslims. This village is surrounded by villages occupied by Hindu cultivators who, on hearing that the Muslims of Softa intended to sacrifice a cow on 'Id Day, objected to the sacrifice of the particular cow selected on the ground that it had been accustomed to graze in fields belonging to the Hindu cultivators. The dispute over the matter assumed a threatening aspect and the Superintendent of Police of the district accordingly went with a small force of police, about 25 men in all, to try to keep peace. He took charge of the disputed cow and locked it up, but his presence did not deter the Hindu cultivators of a few neighbouring villages from collecting about a thousand people armed with pitchforks, spears and staves, and going to Softa. The Superintendent of Police and an Indian Revenue official, who were present in the village, assured the crowd that the cow, in connection with which the dispute had arisen would not be sacrificed, but this did not satisfy the mob which threatened to burn the whole village if any cow was sacrificed, and also demanded that the cow should be handed over to them. The Superintendent of Police refused to agree to this demand, whereupon the crowd became violent and began to throw stones at the police and to try to get round the latter into the village. The Superintendent of Police warned the crowd to disperse, but to no effect. He, therefore, fired one shot from his revolver as a further warning, but the crowd still continued to advance and he had to order his party of police to fire. Only one volley was fired at first, but as this did not cause the retreat of the

mob two more volleys had to be fired before the crowd slowly dispersed, driving off some cattle belonging to the village.

While the police were engaged in this affair a few Hindu cultivators got into Softa at another place and tried to set fire to the village. These were, however, driven away by the police after they had inflicted injuries on three or four men. In all 14 persons were killed and 33 injured in this affair. The Punjab Government deputed a judicial officer to enquire into this affair. His report, which was published on July the 6th, justified the action of the police in firing on the mob and recorded the opinion that there was no reason to suppose that the firing was excessive or was continued after the mob had desisted from its unlawful aggression. Had the police not opened fire, the report proceeds, their own lives would have been in immediate danger, as also would the lives of the people of Softa. Lastly, in the opinion of the officer writing the report, had Softa village been sacked there would certainly have been within 24 hours a communal conflagration of such violence in the surrounding country-side that a very large number of casualties must have been entailed.

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The riots at Kharagpur, an important railway centre not far from Calcutta, also resulted in serious loss of life. Two riots took place at Kharagpur, the first on the occasion of the Muharram celebration at the end of June and the second on the 1st September, 1928, when the killing of a cow was the signal for trouble to begin. In the first riot 15 were killed and 21 injured, whilst in the second riot the casualties were 9 killed and 35 wounded. But none of these riots are to be compared with the long outbreak in Bombay from the beginning to the middle of February, when, as we have seen, 149 persons were killed and well over 700 injured.

For the origin of this outbreak we must go back to December 7th, 1928, when a strike broke out at the Oil Companies installations in Bombay. All the oil companies engaged Pathan workmen in place of the strikers, who were predominently Hindu, and this led to serious clashes between the Pathans and the oil-strikers, involving loss of life. Rumours gained currency in Bombay city that children were being kidnapped and conveyed to Baroda for sacrifice in connection with the construction of a bridge there. On the night of the 2nd February the kidnapping scare may be said to have really

begun, and the first overt act of assault took place that night when an attack was made on a Pathan Motor driver. The next day a Greek Engineer was assaulted, a Hindu carpenter was killed, and in various parts of the city, Pathans and other persons were attacked. On the 4th and 5th February the disturbances developed into a regular Pathan hunt by the millhands; during these two days 17 Pathans were killed and many were injured. Two Muslims and three Hindus also lost their lives. It would thus appear that the fights between oil strikers and the Pathans developed into murderous assaults on Pathans and others, particularly by millhands, which assaults were, in addition, connected with a kidnapping scare. These again developed into general murderous assaults by Muslims on Hindus and by Hindus on Muslims and persons outside these communities also suffered.

On the afternoon of February 5th, Deputy Inspector Priestly who was on duty with ten armed policemen near Poibavdi, in Bombay City, made an heroic effort to separate a mob of Hindu and Pathan combatants, which cost him his life. He was seriously injured and died the same evening in hospital from head wound and shock. That night the Warwickshire Regiment was called out to assist the police in checking the murderous affrays between Pathans and Hindus.

The following day the situation was worse, and between then and February 12th, when the situation returned to normal, the police and military had frequently to disperse riotous mobs and on no fewer than eleven occasions were compelled to open fire on them. The Cheshire Regiment was summoned from Poona on the 7th, and more men of the Warwickshire Regiment and extra police were drafted into the city. The issue of a Curfew Order forbidding people to loiter in the streets between sunset and sunrise had a good effect. A feature of the later phases of the rioting was the widespread looting of shops in the Princess Street area. On the 17th of February it was found possible to disembody the Auxiliary Force, to withdraw the military pickets, and to cancel the Curfew Order.

The total number of bad characters rounded up from different parts of the city during these riots was 681. The toll of human life taken by the riots was 149. This number includes 92 Hindus, 54 Muhammadans, including 25 Pathans, 1 Parsee and one European.

One hundred and fifteen rounds of ammunition were fired by the military and 53 by the Police. Between the 6th and 9th February 61 shops were looted, comprising 34 Muhammadan shops, 24 Hindu, two Parsee and one Christian. The total amount of property stolen during the riots was valued at Rs. 4,62,931. Muhammadan shops suffered damage valued at over 4 lakhs of rupees.

But inter-communal antagonism was not the only disturbing feature of the public life of India during the year under review. The growth of communist propaganda and influence, especially among the industrial classes of certain large towns, caused anxiety to the authorities. The present, however, is not a suitable opportunity for discussing this particular phase of Indian affairs, because, in March 1929, 31 persons were arrested on a charge of conspiracy to deprive His Majesty the King-Emperor of his sovereignty of India, and their trial is now proceeding. In order to combat the dangers arising from communist activities the Government of India introduced a Public Safety Bill in the Legislative Assembly and the reader is referred to the debates on that Bill for an appreciation of the situation as it presented itself to representatives of the Government and to non-officials of various shades of opinion.

The Bill was introduced in the Legislative Assembly during the Autumn Session of 1928 and was directed against persons not being Indian British Subjects, or Subjects of an Indian State, who might seek to overthrow the system of Government established in British India, by certain destructive methods, which may be summed up as the methods of communism. The remedy proposed was deportation by order of the Governor-General in Council who was to be given power to remove from India, British and foreign communist agents.

The Bill was introduced in the Assembly on the 4th September, 1928, and, after having been discussed for four days, was referred to a Select Committee. In Select Committee, important modifications by way of safeguards were introduced. The duration of the Bill was limited, in the first instance, to five years, and its scope was further reduced by excepting from its provisions British subjects ordinarily resident in British India. This safeguarded against deportation the large class of European British Subjects who, though not domiciled in British India, have their careers there.

Two classes of appeals were also provided. Of these, one, which was to lie to the High Court, was restricted to persons claiming that they came within one of the classes excepted from the operation of the Act. The second, which was to be heard by a Bench of three Sessions Judges of experience, allowed the examination by such Bench of the merits of the order or removal, and, if the Bench reported to the Governor-General-in-Council against the order, the Governor-General-in-Council was required to revoke it. On the motion that the Bill, as reported by the Select Committee, be taken into consideration the voting was equal (61 against 61), and the President gave his casting vote against the motion. The motion was consequently rejected.

Between the autumn session of the Legislature and the opening of the Delhi Session at the end of January 1929, the situation arising out of communist activities had, in the opinion of Government, seriously deteriorated, and accordingly they considered it their duty to place a revised Bill before the Legislature. The account of the proceedings in the Legislative Assembly relating to the Bill will fall more appropriately within the scope of next year's report. It is sufficient here to say that the Bill could not be proceeded with and effect was ultimately given to the principles contained in it by an Ordinance dated the 12th April, 1929, made and promulgated by the Governor-General. The Ordinance gave Government the powers which had been proposed in the revised Public Safety Bill subject to the safeguards set up therein. In addition to the provisions of the original Bill as reported by the Select Committee it made certain provisions regarding the seizure of monies.

In addition to the two unsettling factors provided by inter-communal antagonism and communist activities during the year under review, the industrial life of India was far more disturbed than during the preceding year. The total number of strikes was 203, involving no less than 506,851 people, as compared with 129 strikes in 1927-28 in which 131,655 people were involved. The total number of working days lost was 31,647,404 which is greater than the total number of working days lost in the five preceding years taken together. The general strike in the Bombay Textile Mills alone, was responsible for a loss of 22,347,620 working days.

Among the strikes which occurred during the year were those in the Tata Iron and Steel Mills at Jamshedpur, the East Indian Rail-

way, the South Indian Railway, and the Fort Gloster Jute Mills in Bengal. In nearly one-third of the strikes the workers succeeded in obtaining concessions.

A serious development in connection with industrial disputes occurred on the 28th March, 1928, when a body of strikers, estimated at between 2,000 and 4,000, dissatisfied with the reported refusal of their demands by the Agent to the East Indian Railway, proceeded to Bamangachi, where the East Indian Railway loco sheds are, a place about two miles to the north of Howrah, with the intention of putting pressure on the Loco workers there, and particularly on the engine drivers, to come out of work so as to paralyse the railway. On arrival at Bamangachi a number of the crowd rushed towards the loco shed which some of them entered. The workmen in the shed were abused and one of them was hit by stones. Some of the police on duty in the neighbourhood at once appeared followed by some men of the Frontier Rifles, a detachment of which was in camp on railway land in the neighbourhood. On seeing the police thus reinforced the strikers retired. When the Superintendent of Police of the Howrah district, Mr. Sturgis, and the Officer Commanding the detachment of Frontier Rifles, Captain Christie, arrived at the scene of disturbance shortly after this, they found the rioters collected in two crowds, one at the eastern approach to the shed and the other at the western approach. Mr. Sturgis ordered the crowd at the eastern approach to disperse, but his order was ignored. He then charged the crowd with the police available and cleared the approach. He next ordered the other crowd, consisting of about 800 men, to move from the western approach. On their refusal to do so he attempted to disperse them with the police, aided by Watch and Ward employees of the East Indian Railway Company. The crowd not only refused to disperse, but resisted the attempts of the police and started to throw stones. As a result of this Mr. Sturgis had one of his ribs fractured, the Superintendent of the East Indian Railway, Watch and Ward, had his face cut open, and several of the police were injured. The situation then became so serious that firing was essentially necessary. Accordingly, Mr. Sturgis, the senior civil officer present, ordered Captain Christie to fire one shot at the crowd, but this produced no effect, and it was not till five single shots had been fired in succession that

the crowd dispersed. Two men were killed and two others were injured in this affair.

There was a general strike in the Textile Mills of the Bombay Mill Industry, which lasted from the 26th April to the 6th October 1928, and involved the loss of three and a half crores of rupees in wages to the workers, and over two million working days to the industry. Following a number of small mill strikes and one large strike affecting the Sassoon group of mills, on the 16th April, about 100 strikers from the Kastoor Chand and the Textile Mills visited the Mahomedbhoy and Currimbhoy Mills and threw stones, causing serious damage to property. To avert further damage the management immediately closed the mills, and their decision was quickly copied by the management of nine other mills. A mass meeting of the strikers was held in the evening, at which immediate declaration of a general strike was urged. The grievances, as alleged, were the introduction of new systems of work, retrenchment in consequence thereof, increase in hours of work, and reduction in rates of wages. On the 17th April eight mills closed down and the Bombay Textile Labour Union, which had so far taken no part in the strike, held a meeting to persuade the workers against the general strike. Between the 18th and the 23rd April, as a result of the agitation carried on by the extremist section of the strikers, the situation considerably deteriorated, and 23 mills had to close down. The trouble extended to a number of other mills, and by the 26th every mill in Bombay City, except two at Colaba, was compelled to close its gates. Even Sholapur, an industrial town about 283 miles east of Bombay was affected, and on the 21st April the employees of the Sholapur Spinning and Weaving Mill, without any apparent reason, suddenly struck work. At one time during the strike in Bombay no less than 50 mills were idle and about 125,000 men were out of employment. The Bombay Mill Workers Union, the Workers' and Peasants' Party, and the President of the Girni Kamgar Mahamandal appointed a Strike Committee of 85 members, whilst the Bombay Textile Labour Unionists formed their own Strike Committee of ten. On the 27th April His Excellency the Governor came down to Bombay from Mahbleshwar and granted several interviews. As a result of the Governor's visit, the Mill Owners Association expressed their readiness to receive representatives of Registered Trade Unions with a view to opening negotiations for a settle-

ment of the dispute, and the extremists decided to join hands with the moderates in the preparation of a statement of the grievances of the men for submission to the Bombay Mill Owners Association. A Joint Strike Committee was constituted, on the 3rd May, composed of ten workers from each group. But during the first two weeks in May, though the Mill Owners were willing to open negotiations with the officials of the Bombay Textile Labour Union (a Registered Body)—they refused to have anything to do with the Joint Strike Committee, as it was then constituted. The Joint Strike Committee on the other hand, refused to allow the officials of the Bombay Textile Labour Union to carry on negotiations over their head. On the 15th May, the Hon'ble Sir Cowasji Jehangir, General Member of the Bombay Government, received a deputation from the Mill Owners and the Joint Strike Committee with a view to opening the way for a Round Table Conference, but the parties were unable to agree with regard to the members of the Conference. In August a Conference of the Mill Owners and the Joint Strike Committee was held under the presidency of Sir Cowasji Jehangir, and this also failed to come to any agreement. Several private attempts to bring about a settlement of the strike met the same fate. Finally, a Conference called by the General Member of the Bombay Government, on the 4th October, was able to arrive at a settlement on the basis of the appointment of a committee of enquiry by Government. It was agreed that work should be resumed on the 6th October, and between that day and the 11th, about 50 per cent. of the number of workmen originally affected were attending their mills. The large exodus of workers from Bombay—more than half the strikers had drifted back to their villages—made it impossible to resume normal working until well into November.

A few incidents in connection with the strike may be mentioned. In the Parel area of the City, Police were compelled to fire on a mob of six or seven hundred strikers, killing one and seriously injuring one. The activities of the Strike Committee of 85 members, which has been mentioned above, added to the prevailing tension, and turbulent scenes occurred on the 23rd April, in which a number of policemen and non-strikers were seriously injured.

Before closing the narrative of disturbing features in the public life of India during the year under review a brief account must be given of two important manifestations of agrarian agitation in

places as far apart as the west of the Bombay Presidency and the south of Burma.

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The agitation in the Bardoli Taluqa of the Surat District in the Bombay Presidency arose out of the revision of the Land Revenue Assessment of the district. In all districts of British India, except those under permanent settlement, the assessment of land revenue is revised periodically, so that the survey and assessment of land for Land Revenue purposes is going on continuously in some part or other of India. At intervals of about thirty years, each district not permanently settled undergoes a sort of Doomsday Inquest, called the " Settlement " of the district. The Surat district was " re-settled " in 1926, after an interval of exactly thirty years, and the officer who conducted the settlement recommended that the Bardoli assessments should be raised by 30 per cent. His recommendation was challenged on the ground that his enquiry had been a cursory one, and his report was rejected by a higher official, the Settlement Commissioner, who proposed an enhancement of 29 per cent. which the Bombay Government further reduced to 20 per cent. Their decision, however, was not accepted as reasonable by the revenue-payers and an agitation against it was started. For some months, the agitation gathered strength and a somewhat dangerous state of tension between the authorities and the revenue-payers existed. Ultimately, a settlement was reached acceptable to both the Government and the revenue-payers of Bardoli.

Under the terms of the Settlement, a joint and open enquiry by a judicial and a revenue officer was to be held into the complaints of the landholders; in the meantime, the old assessment of land revenue was to be paid and credited to Government, the difference between the old and the new assessment was to be paid but held in deposit by the latter, and all agitation was to cease. The observance of the terms of the agreement enabled the Bombay Government firstly to release those who had been convicted or arrested during the course of the agitation, and, secondly, to restore those lands which had been forfeited but not sold. Private effort was successful in obtaining the restoration of lands which had been sold to third parties.

The report of the officers appointed to hold the enquiry was received after the end of the year now under review and so does not

strictly come within the scope of this work. It may, however, be mentioned that the report was favourable to the revenue-payers and recommended a substantial reduction in the assessment as fixed on revision. The Bombay Government have accepted this recommendation.

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About the same time as the Bardoli agitation, a No-Tax Campaign was inaugurated in certain districts in Burma, particularly the Prome, Insein and Tharrawaddy districts. Local associations were formed in each town to resist the collection of taxes, to hinder Government officials in the discharge of their duty, and to harrass non-members of the Association. There were many instances of assault, violence and murder and on several occasions the police were attacked. Reinforcements of military police were sent to the affected districts to preserve order and a large number of village associations were declared unlawful assemblies. In the Tharrawaddy District the movement assumed a revolutionary type and the Provincial Government adopted special measures to prevent it from spreading. The trouble in the Prome and Insein Districts began to wane by the end of February, and by March the situation in the Tharrawaddy district was almost normal.

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Turning now to a description, in the very broadest outlines, of climatic conditions in India during the year, it is enough to say that the monsoon of 1928 was, on the whole, fairly active except in some parts of Northern India where a marked drought was experienced. In the early part of 1929 the same areas were seriously affected by the exceptionally cold wave which prevailed over a great part of the world. Extensive damage was done to crops but accurate figures relating to these are not available at the time of writing. But, however scanty the rainfall may have been in places in the interior of the Peninsula, those parts of India which are drained by rivers rising in the Himalayas are always exposed to danger from flood and the year under review unfortunately witnessed a considerable amount of damage from this cause. As so often happens, Bengal was the worst sufferer.

During the third week in June many villages were inundated in the Midnapur District, and in the following month, Serajgunj, a

prosperous East Bengal jute town, was practically submerged through the over-flow of the River Jamuna. The rivers Kamla, Bagmati, and Gandabi also rose to an abnormal height and caused serious havoc in the districts of Muzaffarpur, Motihari and Darbhanga, rendering thousands of people homeless. In Upper Burma heavy rain during the summer caused railway lines to be breached and many villages to be submerged for days together. Kashmir suffered severely during the first week of September owing to the sharp rise of the River Jhelum, and at one time the capital (Srinagar), was in danger of being submerged. For over a week no mails were delivered, and the telephone and telegraph services were disorganised, thus completely cutting off the Kashmir Valley from the rest of the country. In the west and centre of the Punjab severe damage was caused by the overflow of the three rivers, Jhelum, Chenab, and Ravi, no less than 850 villages being inundated, 7,000 head of cattle swept away, and 16,000 houses damaged beyond repair or destroyed. Twenty-five thousand acres of crops were damaged, though, fortunately, the loss of human life was limited to under fifty souls. In Madras heavy rains and floods in October caused a complete dislocation of railway traffic, many miles of lines and several bridges being swept away. Cocanada, on the East coast was submerged, at one time the danger zone extending for a radius of 85 miles. The East Godaveri District of Madras also suffered seriously about the same time.

The Western side of India was comparatively free from floods during the year under review, but a rise in the River Indus in June did some damage to the Lloyd Barrage Works at Sukkur, and retarded progress for several weeks.

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On the whole, therefore, India was favoured with a good monsoon, though as stated above, floods and drought were responsible for loss and distress in some areas. Not only were the crops satisfactory, but India's foreign trade, both export and import, showed a marked improvement. The exports of merchandise advanced by Rs. 20 crores (or six per cent.) to Rs. 329 crores, while the year's imports rose by Rs. 19 crores (or eight per cent.) to Rs. 280 crores. The Exchange remained stable throughout the year and with the exception of cotton there was a steady demand for all stable articles

of Indian produce—that of jute actually surpassing all previous records.

The amount of goods traffic borne by India's railways during the year 1927-28 showed a substantial increase, the actual receipts from commercial lines amounting to nearly Rs. 102·63 crores, about half a crore more than the revised estimate. It is true that the working expenses of the railways were increased by about three quarters of a crore, but even allowing for that and certain other adjustments, there was a net gain from commercial lines of 12,54 lakhs, which is unanswerable evidence of continued prosperity.

But India's vast size makes homogeneity of climatic conditions impossible, and it usually happens that while some areas are favoured with a good rainfall, others are stricken with either floods or drought. Every year, in some part or other of India, measures have to be taken by the Government in relief of scarcity and distress. These words are used in the Indian Government service in a technical sense. Distress is a milder word than scarcity, and is applied to the conditions of a particular locality consequent on the failure or the undue abundance of the rainfall there. In such circumstances the local officers may or may not find it necessary to take exceptional measures to relieve the distress. Should the distress be widespread, however, then a state of scarcity is declared, which normally involves some Government action in relief of the sufferers. This action generally takes the form of generous advances of *taccavi*, that is, Government loans to agriculturists on generous terms both as regards interest and repayment. During the period under review, relief measures had to be undertaken in Bengal, the United Provinces and the Central Provinces. In the first named province relief measures included arrangements with District Boards to concentrate their work on roads, tanks, etc., in the areas affected. The irrigation and railway departments also undertook various works in the same areas.

In order to enable the reader to picture the action taken by the Provincial Governments to relieve distress or scarcity, a somewhat full account of the action taken during the year under review by the Government of the United Provinces is given.

Here the monsoon arrived punctually and in its earlier stages was plentiful. During August, however, it weakened, and although

rain fell from time to time, by the end of September it appeared likely that the province would have to face a serious calamity. The 1927 *Kharif* (autumn) crop had not been good and the following *rabi* (spring) crop, which at one time promised to be a bumper crop, was reduced to considerably below the normal by excessive winter rains. The damage to the *rabi* crop was particularly severe in Bundelkhand, where the Local Government distributed about 20,000 maunds of improved wheat valued at 1½ lakhs of rupees, during the early part of October. The revenue due on the *rabi* instalment was also remitted, mainly in Bundelkhand, to the amount of Rs. 4,44,000, and suspended to the amount of Rs. 27,000. The *Kharif* crop of 1928, following these two indifferent harvests, suffered damage which varied in severity but was generally more severe in the west than in the east of the province. The rice suffered most, but cotton, which thrives on a light rainfall, was satisfactory, and sugar-cane did not sustain any serious damage. Fodder was scarce in a number of districts. In order to reduce as much as possible the inevitable damage to the *kharif* crops the Local Government took all the steps open to them. The canals were kept running for a full supply of water throughout the period when they generally remain closed. As an emergency measure, the Sarda canal, though it was incomplete, was opened six months earlier than was intended, and it was thus possible to irrigate some 80,000 acres of rice and sugar-cane, which must otherwise have suffered the full effect of the drought. Though the expenditure sanctioned for Agricultural Loans up to September was only Rs. 48 lakhs, the Local Government subsequently distributed as *taccavi* (loans) over and above that sum no less than Rs. 62 lakhs, making the total *taccavi* allotments in round figures, one crore and four lakhs.

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Among the more important committees and enquiries instituted during the year under review may be mentioned the Auxiliary Committee to the Simon Commission and the Age of Consent Committee. The former was appointed under the Chairmanship of Sir Philip Hartog, Kt., C.I.E., to make enquiries into the growth of education in British India and to prepare a " Review of the Growth of Education " with particular reference to its organisation in British

India and its relation to political and constitutional conditions and potentialities of progress. The Age of Consent Committee was appointed under the Chairmanship of Sir Moropant Vishwanath Joshi, B.A., L.O.B., Kt., K.C.I.E., late Home Member of the Executive Council of the Governor of the Central Provinces. Its duty was to examine the state of the law relating to the Age of Consent, as contained in the sections of the Penal Code relating to this subject, to enquire into the effect of amendments made by an Amendment Act to the Penal Code in 1925, and to report whether further amendment of the law was necessary. Both these committees conducted their enquiries during the year under review and their reports, which were published after the close of the year, will be discussed in the next issue of this report.

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In last year's report reference was made to the appointment of the Indian Cinematograph Committee in October 1927. The Committee published their report in August, and their main proposal was the creation of a Cinema Department to form part of the Commerce Department of the Government of India, and to consist of an Advisory Committee with a Cinema Bureau as its executive branch. It was recommended that the Advisory Committee should consist of not more than 14 members of whom 8 (including the chairman) should be non-official; the Central Bureau should consist of a body of technical experts, comprising a Director of Film Production, a camera man, a printing and developing expert and an electrician. Both the Bureau and the Advisory Committee were to be located at Bombay, which is the main seat of production and the chief importing centre for the Indian Film industry. The function of the Bureau would be to give expert advice and assistance, while that of the Advisory Committee would be to tender advice regarding finance and company promotion. The scheme provides for a Deputy Censor at Calcutta, the appointment of a Control Board for purposes of censorship at Bombay with a censor as its chief executive officer, and the establishment of provincial Censorship Boards. The Committee recommended the raising of the censorship fees from Rs. 5 to Rs. 10 per thousand feet, but they were not in favour of any increase of duty on imported films as a protective measure. The Committee were against any preferential treatment

for the admission of British films into India, but they emphasised the desirability of exchanges of educational films between various parts of the British Empire. On the question of granting financial aid to the Indian cinema industry and the introduction of the "quota system", the Committee divided itself equally. The majority recommended the grant of loans by Government on favourable terms to producers on the security of produced films, and also to companies or individuals who proposed to build cinema houses. The minority argued that financial aid at the expense of public funds was unnecessary, especially as the cinema industry was not a key industry but a luxury industry. The majority recommended the quota system, with the twofold object of providing an outlet for suitable Indian films and gaining admission for them to theatres from which they are at present excluded. They proposed to compel every exhibitor to show at least 50 per cent. Indian films. The minority considered this proposal more drastic than the British quota system, and expressed the view that it would be definitely injurious to the Indian film industry. It was, however, unanimously agreed that if the danger of foreign domination ever became imminent, legislative action should be immediately taken to check it. The general conclusions of the Committee were that the cinema industry in India should receive liberal treatment from the Government because it contributes its share to the general revenues of the country and is of great national importance. The report is under the consideration of the Government.

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The Church of England in India has, during the year under review, taken action under the powers conferred upon it by the Indian Church Act, and Corporations Sole, who will be dissolved on the date of the Legal Separation, have transferred the property they hold to Diocesan Trust Associations registered under the Company's Act of 1913. Applications for the incorporation under Royal Charter of the Indian Church Trustees has been made. The 4th Draft of "the Constitution, Canon, and Rules of the India Church" as amended at the session of the General Council held in February, 1928, has been issued to all Diocesan Councils for final consideration, and they have been requested to send their representatives to the next meeting of the General Council summoned for January the

28th, 1930, duly authorised to accept " The Constitution, Canons and Rules " with or without amendment. This being done the General Council will be asked to pass a resolution requesting the Governor-General-in-Council to fix the date for the legal separation. The Statutory rules, framed under the Indian Church Act to secure to congregations worshipping in maintained Churches services in accordance with the rites of the Church of England, have received the sanction of the Secretary of State and have been published for general information in the *Gazette of India* of the 29th June 1929.

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India's relations with South Africa tend to become more and more important with the passing of years. In May 1927, the Government of India appointed the Right Honourable V. S. Srinivasa Sastri, P.C., as their first Agent in the Union of South Africa, to ensure the smooth working of the agreement on the Indian question which was reached between the two Governments at Cape Town in January, 1927, and to consolidate the good relations which the Conference had helped to establish. Mr. Sastri, when accepting the appointment informed Government that he might not be able to stay in South Africa for more than one year, but he was happily able to remain there for more than eighteen months. By his services to his compatriots in South Africa and the promotion of friendly relations between India and the Union, Mr. Sastri has secured a high place for himself in the history of the two countries as a successful Ambassador of India and has laid India under a great debt of gratitude. He has left a high standard of statesmanship for his successor to maintain.

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The most notable departure from India during the year was that of Sir Basil Blackett who left India early in April, after having rendered a little over five years' service as Finance Member of His Excellency the Viceroy's Executive Council. On his first arrival the finances of India were in a far from satisfactory position, and Sir Basil Blackett was responsible for the initiation and also for the successful accomplishment of an ordered financial policy which undoubtedly brought great benefits to the Indian Empire. In all, Sir Basil framed six annual budgets; and the most conspicuous

features of this cycle of administration were the retrenchment of avoidable public expenditure, reduced taxation, reduction in the burden of deadweight debt, financial encouragement to industrial enterprise in India, stabilisation of exchange, the emancipation of Railway finance, and, lastly, remission of the provincial contributions, giving through the agency of the Provincial Governments increased scope for expenditure on nation-building services. Sir Basil himself would be the first to admit that in carrying out this programme he had the inestimable help of a succession of favourable monsoons. Of the various financial reforms which he succeeded in introducing, perhaps the most important was his scheme for the Reduction and Avoidance of Debt, a measure which was undoubtedly of very great assistance to the loan operations of the Government of India during Sir Basil's tenure of office.

Death took a heavy toll of distinguished statesman and politicians in India during the year under review. On June 17th, 1928, Sir Alexander Muddiman, Governor of the United Provinces, died at Naini Tal from heart failure, thus terminating a brilliant career in India extending over thirty years. He took a prominent part in establishing and working the constitution which followed the Montagu-Chelmsford Report. He was the first president of the Council of State, over the deliberations of which he presided with marked success. As Home Member to the Government of India, a post which he filled with conspicuous success, he was also leader of the Legislative Assembly, with whose members, both official and non-official, he enjoyed the highest degree of popularity. Short as was the period of Sir Alexander's tenure of the Governorship of the United Provinces before his lamented death, he had given ample proof that he possessed the rare qualities necessary for success in his high office. The merited tributes paid to his memory by public men and by the newspapers of this country afford some measure of the extent of the loss which India and the Empire suffered by his death.

On November 17th, the death of Lala Lajpat Rai, a prominent Swarajist politician, occurred from heart failure at Lahore. He played a leading part in the political life of his country, and, in the words of His Excellency the Viceroy, there were qualities in him which led many who dissented most sharply from his political opinions to forget their dissent in a genuine appreciation of a very

human personality. Unfortunately he had been injured slightly during a collision between the Police and some members of a crowd which had demonstrated against the Simon Commission on its arrival in Lahore 18 days before his death. This incident was made the basis of a charge against the Punjab Police, and through them the Government, of having caused Lala Lajpat Rai's death. It was, however, the case that between the incident of October 30th and his death he followed his regular mode of life, and it was evident that this occurrence had no direct relation with the cause of his death. The Punjab Government instituted an enquiry into the incidents at the railway station which showed that the police had acted with restrain. Lala Lajpat Rai's death formed the subject of debates in both the Legislative Assembly and the Punjab Legislative Council.

The death of Lord Sinha, which occurred on March 5th, 1928, at Berhampore (Bengal) from heart failure, was a great loss to India and the Empire. The first Indian to rise to be Advocate General of Bengal, Law Member of the Viceroy's Executive Council, Under Secretary of State for India, a British Peer, and Governor of a Province (Bihar and Orissa), he was a lawyer of the highest distinction, and his eminence was recognised not only by his being made a King's Counsel, but also by his elevation to the Privy Council. He represented India at the Peace Conference and on the Imperial War Cabinet. His was a career which marked an epoch in the history of India. He successfully combined a real appreciation of what he had learnt in the West, and a real understanding of Great Britain, with the retention of his character and outlook as an Indian. He was, therefore, able to render marked service in interpreting India to Britain. Of his work in politics, it need only be mentioned that as President of the Indian National Congress he was the first to ask for an authoritative definition of the British goal of policy in India, which was later on laid down on behalf of His Majesty's Government in the House of Commons in the declaration which Mr. Montagu made on the 20th of August 1917. In Lord Sinha India lost one of her greatest sons.

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With the death of the Honourable Mr. S. R. Das, Law Member of the Viceroy's Executive Council, on October 26th, 1928, from an

affection of the lungs, India lost another eminent and loyal son. The late Mr. Das was Advocate General of Bengal before his elevation to the Governor-General's Council, and his work to found a school for Indian boys, modelled on the lines of an English Public School, occupied all his leisure hours. A distinguished lawyer and public man, who was liked both by the friends and the opponents of the Government which is served, he was an outstanding figure in that group of Indian patriots who have been able to combine in their work service to both Britain and India.

The Raja of Panagal, Leader of the Non-Brahmin Party and formerly Chief Minister of the Madras Government, died on the 15th December, 1928, from influenza. He was the second minister in the first Non-Brahmin Ministry of the Reformed Council. As leader of the Non-Brahmin Party he proved himself a clever tactician and successful politician.

CHAPTER II.

Politics during the Year.

Earlier numbers of this Report have not failed to draw attention to the many different sides which Indian politics present to those who study them, for the politics of India are very far from being wholly comprised within the doings of her Central Legislature and Central Government. Every province in the country has its own politics and its own political life, more or less vigorous, its own peculiar political problems, and its own solutions for them, and the view of the Central Legislature on any given matter of policy is far from being, as a matter of course, the same as that of all, or even any one, of the provinces.

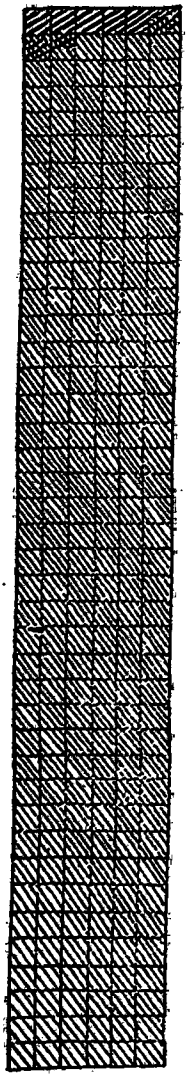
We shall see in this chapter that every Provincial Legislative Council in India, except one, had decided by the Autumn of 1928 to appoint a committee elected from among its own members to co-operate with the Statutory Commission, whereas the Legislative Assembly decided against co-operation in February, 1928, and subsequently furnished no reason for leading the Government of India to suppose that it would change its opinion if the question were submitted to it a second time.

Apart from the Legislature, an important element in the general political life in this country is furnished by certain political, religious, communal and other organisations, which exert an influence—at times a very powerful influence—on the general course of politics. In the United Kingdom and other Western countries, people are familiar enough with party organisations, but bodies like the All-India National Congress, the All-India National Liberal Federation, the All-India Muslim League and the All-India Hindu Mahasabha are different from, and something more than, ordinary party organisations. At times their claims for the allegiance of the people differ from those of the Provincial and Central Legislatures of the people; at other times political leaders seek to shape policy and direct the broad course of political events through their influence in these bodies rather than through their doings, and those of their parties, in the Legislatures. In fact, part of the proceedings in the different Legisla-

DIAGRAM.

The Voters of British India.

7·4 Millions — Enfranchised (Shaded deep)



239·6 Millions — Unenfranchised (Shaded light)

N.B.—Each square represents 1,000,000 of population.

latures represent an attempt to bring into operation mandates received from one or other of the bodies mentioned above. This remark is particularly true of the All-India National Congress. Altogether, India is so large, and political activities in this country are so wide and varied that it is not easy for an observer to keep himself closely in touch with all the provincial policies or the proceedings of the numerous organisations mentioned above, and for this reason the doings of the Central Legislature and the political parties which compose its two Houses are generally taken as the sum of the political life of the country. Limitations of space make it necessary to follow in this chapter the well beaten track of what may be conveniently called All-India Politics. Nevertheless, references will be found here and there to events of a political kind in the Provinces, as also, some description of the proceedings of organisations and bodies unconnected with the various legislatures which may, perhaps, open out vistas in the wide and varied political landscape lying outside the walls of the Council of State and the Legislative Assembly.

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A broad survey of the political scene in India during the twelve months which are now being passed in review reveals two prominent features standing above and overshadowing all else. The first of these two features is formed by the doings of the Statutory Commission and the reactions to them throughout India, and the second by Hindu-Muslim relations. Forming a connecting link between the two is the Nehru-Sapru Report, which will receive further discussion later in this chapter. The report, as we shall see, is both a part of the reaction to the appointment of the Statutory Commission, and also the most important attempt made since the Lucknow Pact of 1916 to devise a settlement of the political differences between Hindus and Muslims which should receive the maximum amount of agreement on both sides. As it is now always referred to in the Indian press and on public platforms as the Nehru Report, this is the title which will be given to it throughout this chapter. Thus, to continue our analogy, we shall most easily map out the country through which we have to pass in the succeeding pages if we work from the vantage ground provided by these two outstanding points, and our discussion of the broad political relations between the two communities will be

found to resolve itself into an account of the progress of the Nehru Report.

Although few individual events of dramatic interest have occurred during this period, the story of the year's politics is of unusual interest, for it includes developments and changes in the grouping of opinion in this country, the effects of which will, in all probability, be of more than merely temporary interest and importance. The Statutory Commission, helped by its Indian Wing composed of members of the two houses of the Indian Central Legislature, and by the Committees elected by the Legislative Councils of every province in the country, with the solitary exception of the Central Provinces, has carried out its programme of enquiry thoroughly and completely, in spite of hostile receptions in some of the places which it visited. The Muslims have achieved an impressive measure of unity in respect of their communal claims, a notable attempt has been made to erect the frame-work of a constitution for India which, it was hoped by its authors, would be found acceptable to all communities and interests, Mr. Gandhi has returned to the political arena, and a dangerous and re-actionary resolution has been taken by an important political body, namely the All-India National Congress. The Nehru Report and the Congress Resolution again have both resulted from, and contributed to, the changes and reactions above mentioned, and it will be our task in this chapter to study these and other phenomena in as great detail as the limits of our space will allow.

In our study, in the preceding Chapter, of one particular aspect of Hindu-Muslim relations during the year we saw how the prospects of a long truce in the inter-communal rioting, which has so vexed the life of this country for several years past, lies at the end of the year under the shadow of the Bombay riots. Throughout the year the importance of finding a solution acceptable to both sides of the questions in dispute between the two great communities has been kept by circumstances well in the forefront of men's minds. Very much of the evidence given before the Statutory Commission is a commentary on the importance of finding such a solution, and of all the many considerations which the authors of the Nehru Report had to bear in mind this was the most prominent.

Later in this chapter we shall find more than one statement of the Indian Muslims' position with regard to safeguards for their interests under any future constitutional changes. Practically, their claims amount to a demand for the retention of the existing system of separate communal electorates; for the reservation of seats in the Legislative Councils of Provinces, even where Muslims are in a majority; for the allocation of one-third of the seats in the Central Legislature to their community, and, finally, for the separation of Sind from the Bombay Presidency and the extension of Reforms, similar to those enjoyed by other provinces, to the North-West Frontier Province. It will be noticed that the situation has changed somewhat since March, 1927, when a representative gathering of Muslims in Delhi agreed to the abolition of separate electorates on certain conditions, and also since the Madras Session of the All-India National Congress in December, 1927, when what is known as the "Unity Resolution" was accepted by the Congress. This resolution provided for Joint electorates in the various legislative bodies, with reservation of seats on the basis of population, provided that each community made reciprocal concessions in favour of minorities so as to give them representation in excess of the proportion to which they would be entitled on a population basis. The task of the All-Parties Conference was largely the reconciling of these claims with the counter-claims of the majority of Hindu politicians, one of whose main objects is the abolition of communal electorates.

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Readers of last year's report will remember that the account of Hindu-Muslim relations during the year 1927-28 ended with the adjournment of the All-Parties Conference towards the middle of March, 1928, still unsuccessful in its search for some path leading to unity between the two great communities. But, before adjourning, the Conference appointed sub-committees to enquire into and report on two of the most important factors in the Hindu-Muslim political problem, namely, the form and constitution of the electorate—that is, whether constituencies should remain as at present, organised primarily on the communal basis, or whether Hindu, Muslim and other electors should vote in joint constituencies—and the question of the separation of Sind from the Bombay Presidency. The Conference adjourned only until May, and on the 19th of that month its delegates duly met in Bombay. Sir

Mohammad Shafi and Sir Abdul Karim Ghaznavi and the whole of the Shafi Wing of the Muslim League, together with the leaders of the very large and important Justice or Non-Brahmin party of the South of India, held aloof from the May Conference, and some important political leaders such as Pandit Madan Mohan Malaviya, Mr. M. A. Jinnah, Sir Tej Bahadur Sapru and Mr. Gandhi were unable to be present. In consequence, the Congress element predominated, but the Conference represented many of the schools of political opinion in this country. Dr. Ansari, *ex* President of the All-India National Congress, presided over the Conference, and informed the delegates at the outset that no agreement had been reached on the subject of the electorate, and that the report of the sub-committee which had been formed to consider the question of the separation of Sind from Bombay was not yet ready for submission to the Conference. After much discussion the Conference came to the decision to appoint a small but influential sub-committee to determine the principles of a constitution for India and draft a Report thereon. It was further agreed that the committee should complete the drafting of the Report before July 1st, giving the fullest consideration to the resolutions which had been passed from time to time by the various important communal, political, and other organisations in India. Finally, it was agreed that the All-Parties' Conference should meet again in August to consider the sub-committee's report. The report was published in August and bore eight signatures, including those of Pandit Motilal Nehru, leader of the Congress Party, Sir Tej Bahadur Sapru, leader of the Liberals, and Sir Ali Imam, at one time a member of the Governor General's Executive Council.

The production of the Nehru Report may fairly be regarded as the most important of all the reactions of those who have held aloof from the work of the Statutory Commission to the political situation created by the appointment of the latter in November, 1928. At the time of the announcement of the appointment of the Commission, the Earl of Birkenhead, who was then Secretary of State for India, said that in the three years during which he had been Secretary of State he had twice invited critics in India to put forward their own suggestions for a constitution, and that this offer was still open. These words were regarded by many Indian public men as, and, indeed, were openly stated to be, a

challenge from Lord Birkenhead to political India to produce a constitution which might gain the assent of all interests in this country, and the Nehru Report has been freely stated in the press and on the platform to be the answer to the alleged challenge. However this may be, the Report does represent a constructive effort to build a political platform broad enough and spacious enough to accommodate the many and very varied interests whose assent to the Report would have to be secured before it could be truly said to embody the desire of United India, and in the narrative of its fate will be found the kernel of the interest and importance of the year's politics. But before we turn to this subject we will consider briefly the chronological course of events from the beginning of April, 1928, because by doing so we shall be able to form a clearer mental picture of the year's politics and to appreciate the more fully the circumstances in which the Nehru Report came to birth.

Those who studied the course of Indian political affairs during the twelve months ending on April 1st, 1928, as described in the last volume of this annual chronicle, will remember that the narrative closed with the remark that outside the Legislative Assembly opinion was, on the whole, veering in the direction of co-operation with the Statutory Commission. It should be explained that this remark was based on the slowly but perceptibly growing belief among Muhammadan parties that it would be to their benefit to take advantage of the Statutory enquiry which had been set on foot, on the rise of a similar belief among the leaders and members of the non-Brahmin, or Justice, party of southern India, and last, but by no means least, in the signs, already visible, that by the time Sir John Simon and his colleagues returned to India in October the Provincial Councils would have decided to participate in the work of the Commission by the appointment of committees to work with it. And, in fact, by the end of September all but one of the nine Legislative Councils of the major Provinces had decided to appoint their committees to work with the Commission. Two councils, those of Burma and the Punjab, had made known their decision by the end of March, 1928, and they were closely followed by Assam on April 3rd. The Bengal Council's decision, by the very respectable majority of twenty two, to co-operate with the Commission was taken on July 9th, and was an event of more than usual significance, for, in many

respects, the position of Bengal in Indian politics is unique. Until the Durbar of 1911 the capital of India was at Calcutta, and the Province has always been in the very forefront of political warfare and political change in this country. Thus it came about that the decision of the Bengal Council was viewed with more than ordinary interest, both in India and in England. When it was shortly afterwards followed by the similar decision of the Bombay Council, which arrived at its decision by a still greater majority, the question of the co-operation of the Provincial Legislatures with the Commission might be said to have been settled as far as all but one of the Provinces was concerned. Within a fortnight, Bihar and Orissa followed Bombay in co-operation, but did so by a slender majority. The United Provinces and Madras both annulled their previous decisions not to co-operate with the Commission, and both did so without taking the question to a division. Thus, by the time the Commission returned to India in October every Provincial Council in India, with the exception of that of the Central Provinces, had pledged itself to appoint a committee to co-operate with Sir John Simon and his colleagues in their task of enquiry. Neither the Legislative Assembly nor the Legislative Council of the Central Provinces was asked to reconsider its verdict on the subject of co-operation with the Commission. The second House of the Indian Central Legislature, the Council of State, had chosen by a very substantial majority to co-operate with the Commission, and during the Autumn session of 1928 it elected three of its members—the Honourable Sir Sankaran Nair, the Honourable Sir Arthur Froom and the Honourable Raja Nawab Ali Khan—to form a part of the Central Legislative Committee which, it will be remembered, was to form the Indian Wing of the Joint Free Conference described by Sir John Simon in his letter of February 6th, 1928, to His Excellency Lord Irwin. A fourth member of the Council of State, Sardar Shivdeo Singh Uberoi, was nominated to the Committee by the Governor-General to represent the Sikh Community. The Central Committee was completed by the nomination of five members of the Legislative Assembly—Sir Zulfiqar Ali Khan, Leader of the Muslim Centre Party and a member of the ruling family of Malerkotla State in the Punjab, Sir Hari Singh Gour, an eminent lawyer, Dr. Abdulla Suhrawardy, one of the foremost orientalists in India, Mr. Kikabhai Premchand, one of the most promi-

nent men in Bombay financial circles, and Rao Bahadur M. C. Rajah, President of the All-India Depressed Classes Association.

Thus, throughout the summer of 1928, developments of great importance, as far as the boycott position was concerned, were taking place in the Provincial Legislative bodies, but it is not possible to point to any such open changes in the country at large, and, generally speaking, throughout the whole of the period under review the important political organisations, such as the All-India National Congress, the All-India Liberal Federation, and Mr. Jinnah's section of the All-India Muslim League, maintained the attitude which they had adopted in their annual meetings in December, 1928, which was one of complete boycott of the Commission. The same may also be said of the important organisation the Hindu Mahasabha, which held its annual session at Jubbulpore in the second week in April, that is, at the beginning of the period which we are now passing under review. The All-India Hindu Mahasabha, as is well known, is a body of delegates representing local Hindu organisations all over India. Its attitude towards any political problem is, therefore of considerable importance. The President at the 1928 session was Mr. N. C. Kelkar, a member of the Legislative Assembly, and a politician of reputation, particularly in that part of India known as Maharashtra, that is, the home of the Maharatta people. His presidential address did not touch the question of the Commission, but confined itself to an analysis of the political situation, particularly to that part of it which is formed by Hindu-Muslim antagonism. Yet, although the Mahasabha did not specifically endorse or reaffirm the boycott of the Statutory Commission, it did not dissociate itself therefrom, and since the outstanding Mahasabha Leaders such as Pandit Madan Mohan Malaviya, Dr. Moonje, and Mr. N. C. Kelkar had identified themselves whole-heartedly with the boycott it was understood that the Mahasabha would do so also. Thus, during the summer months of 1928, whilst one Provincial Legislative Council after another was coming in on the side of the Commission, and choosing its committee to take part in the great Statutory Enquiry which the formation of the Commission had set on foot, the Opposition in the Legislative Assembly, and most of the important political or *quasi*-political bodies and organisations steadily refused to move from the position which they had first taken up with regard to the Commission,

and, on the contrary, devoted their efforts, through certain leaders and representatives, to the production of the Nehru Report.

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During the summer of 1928, while the Nehru Report was in process of gestation, no particular developments in the broad political situation took place, but these months witnessed certain incidents and the progress of certain movements of some significance. Throughout this time, the Bardoli agitation was focussing a good deal of public attention, labour unrest, far from subsiding showed signs of spreading, and these, together with attempts to popularise the Youth Movement, formed a dark patch in a political scene which, on the whole, was tranquil though dull.

However, the attitude of the supporters of Independence for India was not, either practically or in the eyes of the framers of the Report, the most important element in the reception accorded to the All Parties Conference Report. Far and away the most important question was how it would be received by the minority communities, of whom the most important are, of course, the Muslims. The original intention of the All Parties Conference had been to circulate the Report among the different bodies and associations which had joined in the Conference, but as this would have been a very lengthy process, the heads of the All Parties Conference decided to submit it to a special meeting of the Conference to open at Lucknow on August the 28th, at which all interests concerned would have an opportunity of stating their views. Between the publication of the Report and the Lucknow meeting, a certain amount of dissent on the part of Muhammadans, and of some sections of the Sikhs, became apparent, and before August the 28th it was clear that what we have called the communal sections of the Report were going to form the subject of important criticism.

It will be remembered that one of the instructions given to the Committee which drew up the Report was that its basis should be full responsible government for India, and the part of the report which dealt with this was accepted unanimously by the Lucknow Conference, although the resolution by which this is done was couched in somewhat ambiguous terms. This resolution which claimed for India a form of Government not lower in status than that of any of the self-governing dominions was moved by a veteran

nationalist politician, Pandit Madan Mohan Malaviya, who is now the leader of the Nationalist Party in the Legislative Assembly. His resolution was, however, opposed by a younger politician, Pandit Jawaharlal Nehru, son of Pandit Motilal Nehru, who argued that India's goal should be complete Independence and not Dominion Status. As a result of the younger Pandit's very able opposition it was found necessary to draft the final form of the resolution in wide terms, and as passed by the Conference it read as follows:—

"Without restricting the liberty of action of those political parties whose goal is complete independence, this Conference declares—

(1) that the form of government to be established in India should be responsible, that is to say, a government in which the executive should be responsible to a popularly elected legislature possessing full and plenary powers,

(2) that such form of government shall in no event be lower than that of any self-governing Dominion."

A significant commentary on the importance of the communal element in Indian politics at present is to be found on the fact that the discussion on the subject of the separation of Sind from the Bombay Presidency occupied as large, and was as animated, a part of the proceedings of the Conference as the fundamentally important resolution moved by Pandit Madan Mohan Malaviya. The resolution, as put to the Conference, was in the following terms—

"Simultaneously with the establishment of government in accordance with the Nehru Committee Report, Sind shall be separated from Bombay and constituted a separate province provided that—

(1) after enquiry it is found (*a*) that Sind is financially self-supporting, (*b*) in the event of its being found that it is not financially self-supporting, on the scheme of separation being laid before the people of Sind in its financial and administrative aspects, that the majority of inhabitants favoured the scheme and expressed their readiness to bear the financial responsibility of the new arrangement.

(2) that the form of government in Sind shall be the same as in other provinces under the Nehru constitution, and

(3) that the non-Moslem minority in Sind shall be given the same privileges in the matter of representation in the Provincial and Central legislatures as Moslem minorities are given under the Nehru Committee report in areas where they are in the minority."

This resolution was unanimously accepted, as also were other resolutions agreeing to the extension of Reforms to the North-West Frontier and Baluchistan, to the adoption of a system of general electorates based on adult suffrage and without any reservation of seats for any community in the Punjab, and to the reconsideration of the question of communal electorates after a period of ten years. Immediately after the dispersal of the Conference, however, such well known figures in Muslim politics as Mr. Shaukat Ali, the elder of the two Ali Brothers, and Maulvi Mohammad Yakoob, Deputy President of the Legislative Assembly, strongly criticised the way in which Muslim claims had been ignored at the Conference. In fact, as we shall see, Muslim opposition to the Report was to grow steadily stronger up to the very end of the period covered in this Report. Mr. Shaukat Ali's point of disagreement at first glance does not seem a very important one. In one of its recommendations the Nehru Report had diverged from the agreement made at the Madras session of the All-India National Congress in 1927, which arranged for reservation of seats for Muslims even in the two provinces, Bengal and the Punjab, in which they were in the majority, and Mr. Shaukat Ali wanted the Report to be amended so as to bring it back into line with the Madras Resolution. As other sections of the Muslims came into the fray, however, the gap between their opinions and the settlement of the communal problems propounded by the Nehru Report gradually widened until, as we shall see, the end of the year leaves it, to all appearances, as broad as it was before the All Parties Conference began to work. Naturally, Muslim claims evoked counter-claims from the Hindu side, notably from the Hindu Mahasabha, through its chief spokesman, Dr. Moonje, a well known Mahratta political leader who had been President of the Jubbulpore session of the All-India Hindu Mahasabha in April, 1928. From opinions expressed, both by

individuals and at representative gatherings of Sind Hindus, there seems to be no reason to doubt that the majority of the latter are opposed to the separation of Sind from Bombay, and Dr. Moonje took an early opportunity of pointing out that a very important principle was contained in such an operation as the separation of Sind from Bombay and the extension of political reforms to the two predominatingly Muslim areas of the North-West Frontier Province and Baluchistan. This principle was the creation of communal provinces in addition to communal electorates—a principle which, Dr. Moonje believed, struck at the very heart of Indian national unity.

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The Autumn session of the Central Legislature opened in Simla immediately after the conclusion of the Lucknow Conference. Normally, the Legislature would have been given an opportunity by the supporters of the Report to express an opinion on it. Pandit Motilal Nehru himself is a member of the Legislative Assembly and he could have brought the matter up in the form of a resolution in the Assembly asking the latter, in the usual form, to recommend to the Governor General in Council the steps to be taken to put the recommendations of the Report into force as soon as possible. In view, however, of the differences of opinion which have been revealed, circumstances were obviously unfavourable for such a resolution. Indeed, the session had hardly begun when a manifesto was issued, signed by about thirty Muslim members of the Legislative Assembly and various Provincial Legislative Councils, complaining that the Report failed to realise the problems of the minorities in India and omitted to provide safeguards for the protection of their interests. The signatories said that they wanted to make it quite clear that no constitution could be acceptable to Muslims unless it provided effective and adequate safeguards for their interests. The signatures included those of men belonging to all parties in the Assembly, including the Congress Party, and the manifesto made it quite certain that no resolution on the subject of the Nehru Report could get much Muslim support in the Assembly and would be more likely, on the other hand, to give rise to controversy which would still further embitter the existing divisions of opinion.

Between the middle of September, when the Autumn session of the Legislature came to an end, and December, which is the

month when all the great political or *quasi*-political bodies and organisations in India, with the exception of the All-India Hindu Mahasabha, hold their annual meetings, no very definite developments took place either in Hindu-Muslim relations generally, or in the attitude of the public towards the Nehru Report. Broadly speaking, Muslim opinion steadily hardened against it, whilst individuals and bodies associated with the All-India National Congress and the All-India Liberal Federation became more active and enthusiastic in its support. The attitude of the leaders of the All-India Hindu Mahasabha, however, was one of somewhat suspicious watchfulness. There seems to be no reason to doubt that they were prepared to accept the report as it stood, but they were not prepared to accept any modifications in the direction demanded by Muslim opinion, a strong section of which was by this time challenging not merely such details as the reservation of seats for Muslims in provinces, even where they were in a majority, but also the very basis of the settlement of Hindu-Muslim differences propounded by the Report. A representative Muslim meeting held at Delhi in March, 1927, had resolved to accept joint electorates on certain terms, but now the opponents of joint electorates on any terms were once more making themselves heard, and the questions of the separation of Sind from Bombay and the extension of Reforms, at any rate to the North-West Frontier Province, occupied a leading place in the discussions which proceeded in the press and on public platforms. In these circumstances the big annual meetings took place—those of the All-India National Congress, the All-Parties Conference, Mr. Jinnah's wing of the All-India Muslim League in Calcutta, and the meeting of the All-India Liberal Federation in Allahabad. The meeting of the All-Parties Conference preceded all the others, its primary objective being the establishment of inter-communal unity, on which depends ultimately all safe political progress in this country. This being so, it need hardly be said that the adoption or rejection of the Nehru Report was the main business before the Conference. Between the Lucknow meeting and December the 22nd, when the Calcutta session of the All-Parties Conference opened, Mr. Srinivasa Iyengar and his supporters in the demand for complete Independence had decided not to press their views before the Conference, but to reserve themselves for the All-India National Congress. Therefore the only opposition to

the Nehru Report, which was likely to be made in the Convention, was that of the Muslims, who chose a number of representatives to attend and press their claims. But it was not until the proceedings of the Conference had almost come to an end that the Muslim delegates, headed by Mr. Jinnah, attended a meeting. On that day Mr. Jinnah powerfully put forward the Muslim claims in the form of a series of amendments to the main resolution which approved of the Nehru Report, and in these amendments he claimed one-third of the elected seats in both Houses of the Legislature, the reservation of seats in Bengal and the Punjab in the event of adult suffrage being established, the vesting of residuary powers with the provinces and not with the Central Government, and the separation of Sind which should not be dependent upon the establishment of the Commonwealth. The Conference, however, after listening to an impassioned appeal from Mr. Jayakar, the Deputy Leader of the Nationalist Party in the Legislative Assembly, rejected Mr. Jinnah's amendments. Mr. Jayakar's main objection was that Mr. Jinnah's proposals ran counter to the basic principles on which the communal settlement had been erected at Lucknow. A great part of the strength of the opposition to the Muslim proposals came from the Hindu Mahasabha leaders, who claimed that if any change were made in the communal settlement proposed by the Nehru Report they would entirely withdraw their support from that document. The Sikhs also tried to press their demands for more favourable consideration than the Nehru Report allowed to the claims of their community, but with no success, and on behalf of the Central Sikh League, one of the Sikh Leaders read out a long statement in the Convention announcing the League's determination to withhold its support from the Nehru Report and to take no further part in the proceedings of the Convention. Thus, serious opposition developed to the solution of the communal problem offered by the Nehru Report, and there is no doubt that the opposition on the part of the Muslims was both stronger and more widespread than it had been at the time of the Lucknow Conference. Mr. Jinnah's failure to get any of his amendments to the Report accepted by the Convention made it impossible for him to continue the session of his wing of the Muslim League, which accordingly adjourned.

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Between the Autumn session of the Legislative Assembly and the end of 1928, preparations were made for holding in Delhi a meeting of representatives of all Muslim organisations and schools of thought under the Presidentship of His Highness the Aga Khan. The primemovers in this were Sir Mohammad Shafi, the well-known Punjab Muslim leader, Mr. Fazl Rahimtullah, a prominent member of the Independent Party in the Legislative Assembly, Sir A. K. Ghaznavi, one of the principal leaders of the Bengal Muslims, Dr. Shafaat Ahmad Khan, a member of the United Provinces Legislative Council, and certain other well-known Muslims, and it was attended by a large number of distinguished Muslims from all over India. The meeting duly took place on the 31st December, 1928, and the 1st January, 1929, and resulted in a remarkable display of unanimity on the subject of the Nehru Report in general and Muslim claims in particular. In opening the proceedings of the Muslim All-Parties Conference, as the meeting was called, His Highness the Aga Khan urged closer contact between the leaders of the Muslim community and the masses, so that the opinions of the latter might be better understood and be given more respect than they had received in the past. He then pointed out that it would be impossible for Muslims to live happily in India if the prevailing friction between them and the Hindus were to continue. But, he added, "India could never be a prosperous and self-governing country if such a large and important community as the Muslims were allowed to feel any doubt about the safety of their economic and moral interest." Lastly, His Highness showed that as long as India relied for protection against aggression from outside on the power of Great Britain, the latter would naturally claim a predominant share in the Government of India.

After His Highness's speech, the main interest in the subsequent proceedings of the All-Parties Muslim Conference centred in the difference between the conservative and constitutional school of Muslim thought, represented by such leaders as Sir Mohammad Shafi, Sir A. K. Ghaznavi and others, and the extreme school of thought led by Mr. Mohammad Ali, which stands for Complete Independence for India. In the end, however, a compromise was reached, and the Conference adopted unanimously a compendious resolution in which the Muslim position and Muslim claims were fully and authoritatively defined. The resolution, whilst con-

ceding to Mr. Mohammad Ali on the question of form, reproduced substantially the point of view of Sir Mohammad Shafi and his school of thought. Thus, it omitted the mention of either Dominion Status or Complete Independence as the goal of India's political ambition and simply urged a federal constitution with complete provincial autonomy and residuary powers vested in the constituent provinces. No Bill, resolution or motion regarding inter-communal matters may be passed by any legislature if three-fourths of the Hindu or Muslim members affected thereby oppose it. Similarly it omitted the mention of the Simon Commission and of the Nehru Report, and urged that Muslim demands must be met in any future constitution for India, no matter who its framers may be. The continuance of the existing system of separate electorates is demanded as long as existing conditions remain, and one-third of the seats in the Central Legislature, together with a fair share of places for Muslims in the provincial and central cabinets are claimed. The resolution also lays down that the Muslim majority, in the provinces where they are in a majority, shall not be detrimentally affected by any franchise scheme to be devised in future, and the Central Legislature shall not be allowed to change the constitution except with the concurrence of all the provinces constituting the Indian Federation. Sind shall be made into a separate province and, since the grant of excessive representation to the Hindu minority in Sind is contemplated, a similar grant should be made to Muslims in provinces where they form a minority. Constitutional reforms shall be made in the North-West Frontier Province and Baluchistan so as to bring them on the same level as other provinces, and their Hindu minorities shall be given the same representation as is given to Muslim minorities elsewhere. Provision should be made in the Constitution for ensuring to Muslims their fair share in all the services of the State, and in all statutory self-governing bodies, due regard being had to efficiency, and, lastly, statutory safeguards should be erected for Muslim culture and the promotion of Muslim education, language, literature and personal law. The resolution concludes by declaring emphatically that no constitution will be regarded as satisfactory to Muslims unless it conforms with the principles now enunciated.

When it is remembered that the delegates to this Muslim Conference represented a cross-section of the whole of Indian

Muslim political opinion from the most extreme to the most moderate, and that among the delegates were included prominent members of all the political parties in the Legislature, it will be realised that this resolution is the most authoritative pronouncement hitherto made on the subject of the position of the Muslim Community under any political constitution which might be devised, and, as we shall see, by the end of our period it could claim the allegiance of the great majority of the Muslim Community of this country, no matter what their particular shade of political opinion might be. This was shown on the first occasion after the All Muslim Parties Conference at which an opportunity was afforded to representative Muslims to give their views on the Nehru Report. The occasion was the annual constitutional debate which takes place during the budget discussions in the Legislative Assembly. Usually, the leader of the Congress Party moves that the grant for the votable portion of the expenses to be incurred during the forthcoming year in respect of the Executive Council of the Governor General be reduced by a substantial amount, usually by an amount representating a virtual rejection of the whole grant. This year the debate was initiated on March the 11th by Pandit Motilal Nehru, who based his condemnation of the policy of the Indian Government on the latter's failure to take satisfactory steps to meet what is generally known as the "National Demand", that is the demand formulated by Pandit Motilal Nehru in his amendment to the resolution moved in September, 1925, by Sir Alexander Muddiman, Home Member of the Government of India, recommending the acceptance of the principle underlying the majority report of the Committee which had been set up in 1924 to examine the working of the machinery of the Indian Government since the introduction of the Montagu-Chelmsford Reforms. The gist of the National Demand was that certain political reforms, practically amounting to the grant of immediate Dominion Status, should be conceded by Parliament, and that a Round Table Conference between representatives of the British Government and representatives of political India should meet to discuss the ways and means of implementing these reforms. Speaking on March the 11th, 1929, the Pandit said that the latest form of National Demand was contained in the Nehru Report, whose basic principle, namely the Dominion form of responsible government for India, was accepted by Indians of

every shade of political opinion. Even that wing of the Congress which stood for Independence would accept Dominion Status provided it were immediately conceded. Several times during his speech Pandit Motilal Nehru appealed to the Muslim Members of the House not to treat this matter in a narrow sectarian spirit and not to regard his present motion as a motion in any way concerned with an expression of opinion on the Nehru Report. He declared that the Congress Party would have nothing to do with the Report of the Statutory Commission when it appeared, or with anything that might be done on the basis of that report. Replying to this speech, the Hon'ble Mr. J. Crerar, Home Member of the Government of India, refused to be drawn into a controversy over the Statutory Commission and said that the Government of India stood now—and must continue to stand—on the Parliamentary Declaration of 1917 and the consequences which flow from that declaration. Parliament had appointed a special tribunal to enquire into the grave matter referred to by Pandit Motilal Nehru and, therefore, the Government of India could do no more than say that they loyally adhered to the pronouncement of Parliament and would always endeavour to carry it out in the spirit as well as in the letter.

The communal element in the debate was raised by Mian Mohammed Shahnawaz, a leading Punjabi Member of the Muslim Centre Party in the Legislative Assembly. All Indians, he said, wanted Dominion Status, but that did not mean that they wanted the constitution contained in the Nehru Report. Pandit Motilal Nehru, he said, had asked that his report should not be discussed, but it had come before the Assembly and before the Statutory Commission, and the Pandit had said that it had been accepted by a large proportion of the people of India. Mr. Shahnawaz, however, pointed out very emphatically that it had been rejected by an overwhelming proportion of Muslims. No form of Dominion Status, he affirmed, would be agreeable to Muslims which did not safeguard their rights. He concluded by asking the House why they did not want to wait for the Report of the Statutory Commission, on receipt of which there would be full opportunity for discussing what sort of Dominion Status would really suit India. The next speaker to reaffirm the Muslim point of view was Maulvi Mohammad Yakoob, Deputy President of the Legislative Assembly and a leadng member of the In-

dependent Party, who said that it was not true that the Nehru Report had been accepted by an overwhelming majority of the people of India, for even its basic recommendation for Dominion Status was challenged by those who stood for Independence. Muslims certainly wanted full responsible government but with proper safeguards for minorities, and he referred to the proceedings of the All Muslim Parties Conference in Delhi as convincing proof that the Nehru Report had not been accepted by an overwhelming majority of Indians.

An important contribution to the debate was then made by Mr. Jinnah, leader of the Independent Party. Whilst agreeing with Pandit Motilal Nehru that the Government of India had not made an adequate response to the National Demand and that the unanimous desire of All Indians was for Dominion Status, Mr. Jinnah stated quite definitely that the Nehru Report had not been accepted by the Muslim Community. He received support from inside the Congress Party when Maulvi Mohammad Shafi Daudi, a front bencher of the Congress Party, confirmed the statements which had been previously made to the effect that Muslims did not support the Nehru Report. Only one Muslim in the House, Mr. Sherwani, a member of the Congress Party, spoke in its favour. He thought that Muslim opinion supported the Nehru Report, and he advised his hearers to wait until this opinion throughout the country had expressed itself. In favour of the Nehru Report the most effective speeches were made by Pandit Madan Mohan Malaviya, leader of the Nationalist Party, and its Deputy leader, Mr. M. R. Jayakar. Pandit Malaviya wanted a Round Table Conference to be called to discuss the Nehru Report, and said that any such conference would find ample material with which to make an agreed constitution. Mr. Jayakar thought that it might have been better not to have started constitution-making at all, but said that he could produce a Hindu-Muslim settlement within twenty-four hours if it were known that its terms would really be accepted by the British Government. Mr. Srinivasa Iyengar, Deputy leader of the Congress Party, and a leader of that school of opinion which demands complete independence for India, made a very earnest appeal to Muslim members of the Assembly to vote for the motion before the House and asked why Indians should air their differences in the manner

in which they had been aired that day. He said nothing either for or against the Nehru Report. Colonel Crawford, speaking on behalf of the group of non-official Europeans in the Assembly, referred to the importance of European interests in this country and complained that the All-Parties Conference, out of whose work the Nehru Report had proceeded, had taken no steps of any sort to bring into their discussions representatives of those interests which had real differences of opinion with the interests represented at the Confernce. Towards the end of the debate a very effective contribution was made by the Member for Commerce and Railways, Sir George Rainy, who said that the debate had shown that the difficulties which all who are concerned with the future political constitution of India have got to face were greater than anybody had thought and that there were important questions which called for impartial and independent investigation.

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Hitherto we have been tracing in some detail the course of the attempts made during the period under review to bring to a such cessful conclusion the long drawn series of negotiations between Hindu and Muslim representatives undertaken in the hope of settling finally the points of political difference between the two communities. From the meeting of the All-Parties Conference in Lucknow in August, 1928, when the Nehru Report first came up for discussion, we begin to trace another and hardly less important attempt at unity, namely, the unity of the Muslim Community itself. For some years past the community has been divided among a number of political allegiances, but the appointment of the Statutory Commission, of which, as we have seen, the Nehru Report is one of the reactions, has acted as a powerful centripetal influence in Muslim politics. In last year's report, when we described the response made by Indian political opinion to the announcement of the formation of the Statutory Commission, we showed how, even then, the majority of Muslim opinion, after some hesitation, began to move in the direction of co-operation with the Commission. That movement has continued and has undoubtedly grown stronger through the latter half of 1928 and the opening months of 1929, and, although most of the Muslim leaders who declared for the boycott in November, 1927, have never

since gone back on their declaration, the attitude and the evidence of those of their co-religionists who co-operated with the Commission, and the appearance of the Nehru Report, have profoundly influenced the opinion of the whole community. As far as can be judged from the proceedings of the various meetings and the public utterances of leading Muslims which have been passed in review in this chapter, it seems that Muslims generally are convinced that now is the time to formulate their demands and to stand by them and, secondly, that such differences as exist between different sections of Muslims in the matter of party politics must be left aside for the moment.

The most notable event in Muslim politics which we had to chronicle in our last report was the division of the All-India Muslim League into two rival sections, one led by Sir Mohammad Shafi and the other by Mr. Jinnah. But the events of 1928, and particularly the events of the last few weeks of that year, were clearly bringing these two important leaders closer to each other, and at the beginning of March, 1929, it was announced that they had met in Delhi and had agreed to join forces and reunite the All-India Muslim League. For this purpose they arranged that their two wings should meet simultaneously in Delhi at the end of March, and that each should pass identical resolutions in favour of a joint sitting with the other wing. By March the 28th the delegates to the meetings of the two wings had assembled in Delhi, but Sir Mohammad Shafi was unable to be present on account of illness. Mr. Jinnah issued a statement to the Council of the All-India Muslim League in which he summed up the recent history of the Hindu-Muslim controversy and showed that the League had withdrawn its support from the All-Parties Conference because the latter had changed the basis of the agreement reached between the All-India National Congress and his section of the Muslim League in December, 1927. The statement also said that other political organisations refused to accept the Nehru Report and that the proposals contained in the latter should be regarded as nothing more than the Hindu counter-proposals to Muslim demands. He therefore called upon the All-India Muslim League to state the safeguards which its members wished to see incorporated in the future constitution of India. These safeguards are contained in

the text of a resolution which Mr. Jinnah had intended to move in the open meeting of the League, and are as follows:—

1. The form of the future Constitution should be federal with residuary powers vested in the province.
2. A uniform measure of autonomy should be granted to all provinces.
3. All legislatures in the country and other elected bodies should be reconstituted on the definite principle of adequate and effective representation of minorities in every province without reducing the majority of any province to a minority or even equality.
4. In the Central Legislature Muslim representation should not be less than one-third.
5. The representation of communal groups should continue to be by means of separate electorates as at present, provided that it should be open to any community at any time to abandon its separate electorate in favour of joint electorates.
6. Any territorial redistribution that might at any time be necessary should not in any way affect the Muslim majority in the Punjab, Bengal, and North-West Frontier Province.
7. Full religious liberty, that is, liberty of belief, worship, observances, propaganda, association and education should be guaranteed to all communities.
8. No Bill or resolution, or any part thereof, should be passed in any legislature or any other elected body if three-fourths of the members of any community in that particular body oppose such a Bill or resolution or part thereof on the ground that it would be injurious to the interests of that community or, in the alternative, such other method is devised as may be found feasible and practicable to deal with such cases.
9. Sind should be separated from the Bombay Presidency.
10. Reforms should be introduced in the North-West Frontier Province and Baluchistan on the same footing as in other provinces.

11. Provision should be made in the Constitution giving the Muslim an adequate share along with other Indians in all the Services of the State and in self-governing bodies, having due regard to the requirements of efficiency.

12. The Constitution should embody adequate safeguards for the protection of Muslim religion, culture and personal law, and the promotion of Muslim education, language, religion, personal laws, Muslim charitable institutions, and for their due share in grants-in-aid given by the State and by self-governing bodies.

13. No cabinet, either Central or Provincial, should be formed without there being a proportion of Muslim Ministers of at least one-third.

14. No change to be made in the Constitution by the Central Legislature except with the concurrence of the States constituting the Indian Federation.

15. That in the present circumstances the representation of Musalmans in the different legislatures of the country and of the other elected bodies through separate electorates is inevitable, and, further, Government being pledged not to deprive the Musalmans of this right, it cannot be taken away without their consent, and so long as the Musalmans are not satisfied that their rights and interests are safeguarded in the manner specified above (or herein) they would in no way consent to the establishment of joint electorates with or without conditions.

NOTE.—The question of excess representation of Musalmans over and above their population in the provinces where they are in the minority to be considered hereafter.

Of the above safeguards the most important, as they are certainly the most comprehensive, are those which reiterate the demand contained in the long resolution adopted by the All Muslim Parties Conference at the beginning of January, that the future constitution of India shall be a federal constitution with autonomous provinces vested with all residual powers. The adoption of this condition would ensure Muslim control in those provinces where they are in a majority, namely the Punjab, Bengal,

and the North-West Frontier Province, Baluchistan, and Sind, if or when these three latter are made into provinces on the model of existing Governors' Provinces.

The proceedings of this meeting of the All-India Muslim League, however, did not go according to plan. In the first place the delegates from Sir Mohammad Shafi's wing of the League declared themselves unable to join in the open meeting, as they alleged that certain conditions under which they had agreed to join had not been fulfilled. Again, some members of Mr. Jinnah's section of the League announced their intention of standing by the Nehru Report. With the delegates from Sir Mohammad Shafi's wing abstaining and with this split in his own ranks, Mr. Jinnah found himself unable to complete his programme, and as certain rowdy elements had given proof that they intended to turn the affair into a fiasco, he dissolved the meeting.

Such is the story of Hindu-Muslim relations during the year in the broad field of politics, and a short account of the proceedings of the All-India Hindu Mahasabha, held at Surat at the end of March, forms an epilogue to the tale. It was only to be expected that the formulation of Muslim counter-proposals to the Nehru Report should evoke some feeling among their Hindu compatriots, and from time to time this feeling has found open expression. It was voiced in unmistakable terms by Mr. Jayakar at the meeting of the All-Parties Convention in Calcutta in December, and Mahasabha leaders, particularly Dr. Moonje, one of the foremost of Mahratta politicians and an outstanding figure in the Mahasabha, have, from time to time, given public expression to their opposition to the attitude and claims of the Muslims. At the latest Hindu Mahasabha meeting, which opened on March the 30th, 1929, the Hindu position was stated in no uncertain terms, and of the three resolutions passed, the most important was that which re-defined the position of the Sabha in regard to the Nehru Report. Since Muslim leaders, the resolution declared, had refused to accept the report, the Mahasabha had now gone back to its original position in which it was opposed to special treatment in any matter to any community. Before he left Surat, Dr. Moonje issued a press statement explaining that the Hindu Mahasabha had not yet seriously considered the Nehru Report because it had been already unceremoniously rejected by the Muslims. He declared that had the Muslims accepted the Report

as a compromise, then the Hindu Mahasabha would also have accepted it. He was certain that if Muslims receded from what he regarded as their narrow communal attitude, and accepted the report the Mahasabha would respond suitably.

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It was said earlier in this chapter that the interest and importance of this year's Indian politics is comprised in the work of the Statutory Commission and in the reaction thereto on the part of the different political schools and leaders. We have now traced the history of what is by far the most important reaction to the Commission, and we may very briefly glance at the work of Sir John Simon and his colleagues, and at those events of a political kind which have hitherto lain outside our narrative. The work of the Commission in India is now completed. Its members have visited every province in the country and have undertaken the additional labour of visiting places away from provincial headquarters so as to acquaint themselves, as fully as the time at their disposal allowed, with the conditions of life of the great majority of India's people who live on the land. An immense number of memoranda, some of them bulky volumes, were received from individuals and bodies representing almost every section of the varied peoples and interests of India, and a large number of witnesses were orally examined. In every province, except the Central Provinces, the Commission and their colleagues of the Indian Central Committee had the advantage of the co-operation of Committees elected by the provincial legislatures. The difficulty was not to get evidence but to choose which evidence to hear and how to find time to hear it. In short, the Commission and the Central Committee collected abundant material on which to base their conclusions. After the Commission had completed its tour of India, Sir John Simon invited the members of all the provincial committees which had worked with him to meet himself and his colleagues of the Commission and Central Committee in Delhi.

The meetings took place on the 2nd, 3rd and 4th April, Sir A. K. Ghaznavi presiding over the meetings of the Joint Provincial Committees. The first day was occupied by the statement of Sir Philip Hartog setting out the conclusions reached by the auxiliary committee which had been set up to review the growth of education in India. On the 3rd April, Mr. Layton, Financial

Assessor to the Commission, gave his conception of the considerations affecting the broad financial problems confronting the Commission. On the 4th April Sir John Simon himself addressed the Conference.

On the 13th April, Sir John Simon and his colleagues left Bombay, and prior to his departure he sent the following message to His Excellency the Viceroy:—

"My colleagues and I leave India with the warmest feelings of gratitude for the countless kindnesses we have received from many quarters. We have accomplished the first stage of our task and enter upon the next stage with an ever increasing desire to contribute what we can to a happy future of good relations between Britain and India."

Those who did not read last year's Report will find an account of the procedure to be followed after the Commission has presented its Report in Appendix II, which is an extract from the statement in which His Excellency Lord Irwin announced the formation of the Commission in November, 1927.

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The 1928 session of the All-India National Congress, was, in some respects, the most important session held for some years, and witnessed the re-entry of Mr. Gandhi into politics. We have seen that the Nehru Report is based on the attainment of Dominion Status for India, and we have also seen that one section of Congress adherents reject Dominion Status and demand Complete Independence. At this point it may be as well to give a brief account of the rise and progress of the Independence movement in order to enable readers to estimate the significance of the proceedings of the 1928 session of the All-India National Congress. Readers of last year's report will remember that the Madras session of Congress in 1927 adopted a resolution which claimed complete national independence for India. This resolution was passed only after considerable opposition in the Congress itself, and Mr. Gandhi considered that it "was hastily conceived and thoughtlessly passed". Lala Lajpat Rai refused to attach any great importance to it, and in his opinion it was passed because "many people believed that Dominion Status also meant complete national independence, and that therefore they were not making any radical change in the creed of the Congress". For

more than twenty years, the attainment of Dominion Status, that is, a form of Government as free and autonomous as that of Australia or Canada, has been the avowed political goal of the All-India National Congress. After the split in the Congress at Surat in 1907 a new creed for that body was adopted in which it was stated that the objects of the Indian National Congress " were the demand by the people of India for a system of Government similar to that enjoyed by the self-governing members of the British Empire, and of participation by them in the rights and responsibilities of the Empire on equal terms with those members ". And although in his Presidential address at the Ahmedabad Congress in 1921 Mr. C. R. Das had said " whether within the Empire or outside it, India must have freedom so that she may realise her individuality and evolve her destiny without help or hindrance from the British people ", in 1923, as leader of the Swaraj Party, he definitely gave up the idea of complete independence for India in the sense of breaking off all connection with the British Commonwealth of Nations. In his speech at Faridpur he said that the " Government should guarantee to us the fullest recognition of our right to the establishment of Swaraj within the Commonwealth in the near future, and, in the meantime, until Swaraj comes, a sure and sufficient foundation of such Swaraj should be laid at once ". It was not, therefore, surprising that the demand for complete independence, as formulated at Madras, was considered by some as irresponsible, and by others as inconsistent with the political creed of the Congress, and as calculated to keep a large section out of the Congress fold. But the demand for independence was endorsed at the Punjab Provincial Conference at Amritsar in April, 1928, where all ambiguity was sought to be cleared by a demand for " complete independence outside the Empire " and sanction was given to the employment of " all possible means for the achievement of the aim ". Pandit Motilal Nehru, however, continued to put his faith in Dominion Status and, as we have seen, it was on this basis that the Nehru Report was written. At the Lucknow All-Parties Conference in August, 1928, Pandit Motilal Nehru's son, Pandit Jawharlal Nehru, led the attack on the Dominion ideal, and on August 30th he and his friends formed an " Independence for India League ". At this point Mr. Srinivasa Iyengar, who had hitherto been leading the movement for Independence, was suc-

ceeded by Pandit Jawaharlal Nehru, but he did not relinquish the ideal of independence. The "All-India Youth Congress", shortly after the Calcutta session of the All-India National Congress, adopted a resolution which declared that complete independence should be the immediate objective of India, and called upon the youths of the country to attain it by all possible means. There is thus a certain division in political opinion in India on the question of Dominion Status and Independence, but it should be noted that generally speaking the older political leaders favour the continuance of the British connection, whilst the younger men make the demand for independence.

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Returning now to our main theme, it is necessary to mention that for some months past differences of opinion have existed between Pandit Motilal Nehru and Mr. Srinivasa Iyengar which, it was anticipated, would affect the deliberations at the Indian National Congress, especially over the controversy between Dominion Status and Independence. The death of Lala Lajpat Rai, a few weeks before the session of the Congress, also had an unfortunate effect on the situation. It removed from active politics one of the most enthusiastic and influential of all the supporters of the Nehru Report. In this atmosphere the chances of the acceptance by the Congress of the Nehru Report, with its fundamental condition of Dominion Status, became more doubtful than they had previously been. In any case, an open clash between the two schools of thought in the Congress threatened a serious split in its ranks. The endeavour to find some way to avert this split was, perhaps, the most important of the considerations which brought Mr. Gandhi back, after some years of retirement, to take an active part in the Congress politics.

Mr. Gandhi's task was a hard one, because the differences between Pandit Motilal Nehru and the Independence Party were acute and the latter, led by Pandit Jawaharlal Nehru, came to the Congress determined to defeat the older leaders and secure the rejection of Dominion Status as the basis of the Indian constitution of the future. The first clash between Mr. Gandhi and Pandit Motilal Nehru on the one side, and the votaries of Independence on the other, took place at the All-Parties Convention in Calcutta, which preceded the Congress meetings. A number of informal

conferences took place between the older leaders and the younger men at the head of the Independence Party, but the attitude of the latter did not allow Mr. Gandhi to effect a satisfactory compromise. However, a carefully worded resolution was drawn up by Mr. Gandhi and presented to the Convention for its acceptance. The gist of the resolution was contained in the opening clause, which read:

> "This Congress, having considered the Constitution recommended by the All-Parties Committee Report, welcomes it as a great contribution towards the solution of India's political and communal problems, and congratulates the Committee on the virtual unanimity of its recommendations, and, whilst adhering to the resolution relating to complete independence passed at the Madras Congress, adopts the Constitution drawn up by the Committee as a great step in political advance, especially as it represents the largest measure of agreement attained among the important parties in the country; provided, however, that the Congress shall not be bound by the Constitution if it is not accepted on or before December 31st, 1930, and provided further that, in the event of non-acceptance by the British Parliament of the Constitution by that date, the Congress will revive non-violent Non-co-operation by advising the country to refuse taxation and every other aid to the Government."
>
> "The President is hereby authorised to send the text of this resolution, together with a copy of the said Report to His Excellency the Viceroy for such action as he may be pleased to take."
>
> "Nothing in this resolution shall interfere with the propaganda for familiarising people with the goal of independence in so far as it does not conflict with the prosecution of the campaign for the adoption of the said Report."

This resolution was supported by a number of politicians who had figured in past years prominently in extremist politics, but Mr. Srinivasa Iyengar joined the younger men in refusing to accept it saying, however, that he would not oppose it at the All-

Parties Convention, but would reserve his opposition for the Congress itself. It was quite clear, however, from the debate on this resolution that some of the speakers who supported the Dominion Status ideal most eloquently regarded it not as an end in itself but as merely a stepping stone to complete independence.

* * *

The scene next shifts to the Subjects Committee of the Congress, which held its sitting shortly before the open meeting of the Congress. Here Mr. Srinivasa Iyengar and his companions declared that they would stand or fall by complete independence. In spite, therefore, of Mr. Gandhi's resolution, a split in the Congress ranks appeared inevitable, but after a long conference among the leaders, Mr. Gandhi effected a compromise by agreeing to alter the wording of the resolution so as to give Parliament a time limit of twelve months instead of two years in which to accept the constitution as recommended by the Nehru Report. The clause in the original resolution, relating to the despatch of a copy of the resolution together with the Report to His Excellency the Viceroy was deleted. The clause regarding independence propaganda was also amended so as to permit the advocates of independence to carry on their compaign in the name of the Congress. This resolution was carried in the Congress Subjects Committee. It is worthy of note, however, that some of the more prominent political leaders present, including Pandit Madan Mohan Malaviya and Mrs. Besant, warned the Committee that if they passed this resolution they would now alienate a large body of opinion which was supporting the Congress.

The proceedings in the open Congress need not detain us long. Pandit Motilal Nehru, the President, in referring to the question of Complete Independence *versus* Dominion Status, declared "I am for Complete Independence, as complete as it can be, but I am not against full Dominion Status as full as any Dominion possesses it to-day provided I get it before it loses all attraction". Later in his speech he said "there is no reason why we should seek complete severance of the British connection if we are placed on terms of perfect equality with the Dominions. It must be understood that Dominion Status has to be offered and accepted with all its implications, its rights and obligations which both parties will be in honour bound to accept and uphold". Lastly he pleaded for the acceptance of the All-Parties Conference Report

which, as we have seen, is now generally known as the Nehru Report, claiming that its recommendations were based on the principle of the highest common agreement.

As in the Subjects Committee, the main business of the open session of the Congress was the discussion of the resolution regarding Dominion Status *versus* Independence. After a prolonged and heated debate an amendment repudiating Dominion Status and claiming Independence as India's goal was lost by 973 against 1,350 votes, and the resolution was finally passed as amended in the Subjects Committee. A perusal of the proceedings of the Calcutta Conference leaves the reader with the impression that the movement in favour of Complete Independence for India has gained strength since the resolution in favour of independence was accepted by the Madras Congress a year earlier, but it is clear that the movement has not found favour except among the most extreme sections of the left wing of Indian politics, and particularly among the younger element of that wing. Every organisation or body in India with any claims to be called representative has from time to time declared in favour of Dominion Status, and among such bodies are the All-Parties Conference, the All-India Muslim League, the All-India Liberal Federation, the All Muslim Parties Conference and the majority of the All-India National Congress.

* * *

The All-India Liberal Federation assembled in Allahabad for their annual meeting on December 30th. The President of the Federation this year was Sir Chamanlal Sitalvad, one of the most trusted leaders of the Liberal Party. At the very outset of his Presidential address he contrasted the principles and methods of the Liberal Party with those of the Congress, and said that Liberals worked for constitutional advance by constitutional methods and stood staunchly by those methods and principles even when the Congress strayed away from them, and he concluded his speech by a reference to the Public Safety Bill, in which he regretted the action of the Assembly in rejecting it, because, in his opinion, sufficient safeguards against abuse had been inserted by the Select Committee and these could have been further improved at the second reading. Sir Chamanlal declared, however, that the policy of the Government in the past had been particularly responsible for the growth of extremism

in Indian politics, and he re-affirmed very strongly the adherence of the Liberal Party to the boycott of the Simon Commission.

Another well known politician Mr. Chintamani, Chairman of the Reception Committee, expressed similar views on the dangers of unconstitutional methods of agitation when he said: " Staunch in our loyalty to our ideal of Dominion self-government and firm in our conviction that constitutional agitation is the right political method in the circumstances of our country we have refused to deviate from our chosen path, and are determined as ever to serve the motherland in our own humble way, indifferent to the frowns of an authority and the displeasures of a section of our own countrymen ".

Yet another speaker in the first rank of Liberal politicians, Sir C. P. Ramaswamy Iyer, lately Law Member to the Government of Madras, stressed the same point of view. " The Liberal Federation " he said " from the beginning, through good weather and through bad, has stood for one or two fundamental principles, firstly for constitutional work and constitutional action as differentiated from direct action, and, secondly, for the attainment of Dominion Status ".

From the above pronouncements it is clear that Indian Liberals are going to refuse in 1930, as they refused in 1920, to be drawn into the dangerous ways of non-co-operation, and their views are shared by other eminent Indian politicians who do not belong to the left wing of Indian politics. The National Liberal Federation, before concluding its session, passed a number of comprehensive resolutions regarding the boycotting of the Simon Commission, asking that Dominion Status be immediately established, and according general support to the Nehru Report and the resolutions of the Lucknow All-Parties Conference. Sir Tej Bahadur Sapru, moving his resolution for the immediate establishment of Dominion Status, traced the history of the Reforms from the beginning to the present time, describing the development of political feelings and sentiment in this country. He maintained that the spirit which actuated Mr. Montagu in introducing the Reforms was a short-lived one. He repudiated the idea that Dominion Status did not arouse any enthusiasm and meant still continuing under the heels of England, and he pointed out the dangers of the situation and warned the Indian Government of the

dangers ahead. Sir C. P. Ramaswamy Iyer, seconding the resolution, said that Dominion Status was an entirely real and practical proposition for India. Finally, the Federation appointed a Committee of Sir Chamanlal Sitalvad, Sir Tej Bahadur Sapru, Sir C. P. Ramaswamy Iyer and Mr. J. N. Basu (Secretary) to co-operate with representatives of other organisations for the settlement of communal questions.

* * *

During the two sessions of the Legislative Assembly included in the period under review the Public Safety Bill occupied the main interest of the House and raised the strong and uncompromising opposition of the Congress and National Parties. In the previous chapter we have described the history of the Bill, the modifications that its provisions underwent and the issue of an Ordinance by the Governor General.

Another Bill of much importance introduced in this session was Mr. S. N. Haji's Reservation of the Coastal Traffic of India Bill. In moving that the Bill be referred to a Select Committee Mr. Haji belittled the objection that the Bill threatened the sacred rights of property and enquired if the Government did not owe a greater duty to the people of this country. It had been recognised that it was perfectly legitimate that India should have a mercantile marine of her own, and Mr. Haji failed to see how anyone could shut the door against an examination of one of the measures by which this desire was to be met. Dealing with the objection that the Bill was confiscatory in character, and that it sought the expropriation of existing interests and the exploitation of their property Mr. Haji pointed out that this question had not been raised before the Mercantile Marine Committee, and the objection was not borne out by the meanings which the dictionary gave to expropriation and property, nor could the gradual withdrawal of foreign ships from participating in the coastal trade of India be regarded as an act of confiscation. Moreover, according to Mr. Haji, the position of the foreigners, or Britishers, engaged in the coastal trade of India was that of usurpers who had prevented Indians from getting any foothold in the shipping business. The coastal trade of the country was controlled by a monopoly which had inflicted great economic injury on India, and Mr. Haji was anxious to end that monopoly without substituting for it an Indian monopoly.

Sir James Simpson opposed the Bill because he was convinced that it was neither in the interests of India nor of any of her peoples. He maintained that India's rights and British interests were inter-dependent, and he asked the House to realise to what height among the great trading nations of the world India had been raised by British and Indian co-operation. He further felt that the Bill would take away from the British the right they had always thought they possessed, and that the Bill itself was impracticable and unworkable. The Bill did not mean expropriation of the ships, but it certainly meant expropriation of the good-will and the earning power in the coastal trade of the large British interests who had, through good years and bad years and by immense pioneer work, built up the coastal trade and had at all times met the peculiar requirements of that trade. The principle of the Bill, acording to Sir James, was " confiscation of the deepest dye ". " The country is to provide " said Sir James " such Indian capitalists as the Bill is designed to benefit with the support of the British Army and Navy, while they confiscate British shipping ".

Pandit Motilal Nehru, supporting the Bill, said that if Sir James Simpson and " his constituency would accept now and here the Dominion Status which we claim, I shall be the first to accept his invitation " to go into the lobby with him. Pandit Motilal denied that the Bill was discriminatory in character, because discrimination in legislation implied discrimination " between ourselves and individuals ", and did not mean regulation of the trade of a country, or that the legislature was incompetent to remove anomalies. Mr. G. D. Birla remarked that if the organised killing of the Indian trade meant to the Britishers a proprietary right, that right should be immediately taken away from them. He argued that the history of the past few years showed that the Government of India had made no attempt to protect the Indian industries with the result that nearly 10 crores had been lost by private enterprise.

Sir George Rainy, dealing with the operative clause of the Bill, enquired if the mover was sure that any of the ships employed in the monopoly, which he had attacked, were in fact common cariers. The point had to be carefully considered because it would put the House in a somewhat ludicrous position if, after the legislation had been passed, it should totally

fail to carry out its professed purpose. The Bill was supposed to extend to the whole of the coastal traffic of British India and of the continent of India. Sir George thought that it ought to be cleared up as to whether Ceylon would come under the operation of the Bill. As regards the foreign settlements in India, Goa and Pondicherry, though it was within the power of the Indian Legislature to pass a law restricting the trade between those two points and British Indian ports to Indian ships, if such a law were passed it would involve a contravention of some of the international obligations, and in particular of the Maritime Convention under which the ships of all signatories were entitled to ply. " We should have to denounce that particular Convention " said Sir George Rainy " and I think also our commercial treaties with Portugal and France ". Sir George asked the House to realise that under the Bill it was provided that it would be illegal for any subject of an Indian State to take part in trade between a port of his State and a port of British India. The matter, therefore, was not one in which the Legislature should fairly assume the final authority, but ought only to proceed in agreement with the authorities responsible for their administration. It seemed to Sir George that there were loopholes all along the line, and that it would not be difficult for any great shipping corporation to evade the restriction. If that happened, the inevitable effect would be the transfer of a great deal of trade from British Indian ports to the other ports. The Government of India had carefully considered the Bill and they had come to the definite conclusion that it would be ineffective, and that there were too many loopholes in it, and that therefore the Bill, if it was passed, would not accomplish its object. Sir George also complained that for 2½ years the economic objections raised by Sir Charles Innes had remained unanswered. He particularly referred to Sir Charles Innes's apprehension that as more than half the coastal trade in India was between India and Burma, the reservation of the coastal trade would mean a more expensive service and higher fares, which would lead to an irresistible demand from Burma that they should be left out of the scheme. Moreover, legislation in this country was likely to interfere with the efforts of the Government of India in the interests of the Indians who were settled in British colonies and dominions, because they would not hereafter be able to claim that the Indians who went to these territories were entitled to

equal treatment with other British subjects, and that there should be no discrimination on racial grounds. Sir George repudiated the charge that those who opposed the Bill were definitely opposed to the development of an Indian Mercantile Marine, but he opposed the reference of the Bill to a Select Committee because the Government believed that in doing so they were acting in the true interests of the country and that it was impossible in any useful way to develop an Indian Mercantile Marine by the reservation of the coastal trade.

Mr. Shanmukhan Chetty, in supporting Mr. Haji's motion, pointed out that the British India Steam Navigation Company had been held by the Madras High Court to be common carriers. He maintained that if the Bill was passed, Indian companies would be started and Indian capital would be forthcoming to support them. Mr. J. A. Stewart warned the House that the Bill, if passed, would accentuate the demand for the separation of Burma from India, because it would be felt that in a vision of advantages and disadvantages between India and Burma the latter took all the kicks and the rest of India got " all the ha'pence ". Mr. U. Tok Kyi mentioned that the Burma Chambers of Commerce had supported the Bill, and he thought that the Bill was based on the principle of self-preservation of the most modern type. Sir Victor Sassoon wished to be satisfied that there would be no acquisition of assets, whether tangible or intangible, without proper compensation, that there would not be so many loopholes as to render the scheme impracticable or unworkable; that the desired end would be achieved without raising freights unreasonably; and that there would be sufficient tonnage at all stages for the needs of merchants. Lala Lalpat Rai did not regard the difficulties as insurmountable, and supported the motion for reference to a Select Committee.

Mr. G. S. Bajpai pointed out that under a resolution passed at the Imperial Conference in 1918 the Dominion Government had taken power—and the Government of India had acquiesed in it—to regulate the composition of their own population. In the Bill before the House, however, there was no provision to safeguard European capital or the capital of the nationals of other dominions. Therefore, while the resolution aimed at protecting existing rights, Mr. Haji's Bill was silent on that point. He also felt that the principle underlying the measure would weaken the

struggle which the Government of India were carrying on to secure equal status for Indians who had settled beyond the seas. Sir Tej Bahadur Sapru, at the Imperial Conference of 1923, and the Right Hon'ble Srinivasa Sastri in 1921 had pleaded for political and economic equality for Indians. They had based their pleas on the ground of common allegiance. If the House passed any measure involving an infringement of that principle of common allegiance, involving complete equality of rights, it would be weakening the arms of those who were trying to secure equality for Indians settled in other parts of the British Empire.

Sir George Rainy, in winding up the debate, maintained that the Bill involved both expropriation and racial discrimination and would have most unfortunate repercussions in South Africa and in other British Dominions. The motion was carried by 71 votes against 46.

* * *

Before leaving what we might call the regular work of the Legislative session, we might glance briefly at the course of an interesting debate which took place on a resolution by the Rev. J. C. Chatterjee on the education of girls and women in the territories administered by the Central Government.

Mr. J. C. Chatterjee asked for a substantial grant, capital as well as recurring, for the furtherance of girls' education, for the esablishment, as a first step towards it, of a well-staffed and up-to-date college for the training of women teachers, and for the appointment of a competent committee, including prominent women, to go into the subject and make a report. He contended that for every ten schools for boys there was not even one for girls, and criticised the disparity between the expenditure on the education of boys and that on the education of girls. Compared with 1916, when only ·9 per cent. of women were literate, in 1926 the proportion had risen only to 1·3. Mr. Mukhtar Singh desired to enlarge the terms of the resolution so as to provide free and compulsory primary education for girls between the ages of six and eleven, and as a first step to that end to establish at once a sufficient number of women teachers' training schools in the centrally administered area. A lengthy debate followed in which *inter alia* Maulvi Mohammad Yakoob, Sardar Gulab Singh, Rai Sahib Harbilas Sarda, the late Lala Lajpat Rai, Nawab Sir Sahibzada Abdul Qaiyum, Sir Hari Singh Gour, Mr. Gaya Prasad Singh,

Pandit Thakurdas Bhargava and Mr. D. V. Belvi took part, and Mr. Chatterjee's resolution received a great deal of support.

Replying on behalf of the Government Mr. G. S. Bajpai admitted that progress in the sphere of the education of women had lagged behind the aspirations of the people and of the Government of India. The debate had revealed much diversity of opinion as to the best methods for tackling the problem, and the Government felt it desirable to confine themselves to the proposal for the appointment of a committee of enquiry. Ever since the debate on the resolution regarding the education of the depressed classes Government had been giving their very careful consideration to the whole question of primary education in the areas directly under their administration, and they had decided to appoint a committee to enquire into—

(*a*) the existing facilities for primary education for boys and girls;

(*b*) the possibility of expansion whether on a voluntary or compulsory basis, with special regard to the attitude and aptitude of the local population; and

(*c*) the necessity for providing special facilities for the community generally known as untouchables, and to make recommendations.

The Government had also decided to include in this committee educational experts and representatives of the Assembly, and it was their intention that this committee should have the benefit of the services and the experience of a lady interested in and conversant with the problem of the education of women. As regards the proposal to found a first grade women's college, which the late Lala Lajpat Rai had advocated, Government proposed immediately to consult the minor administrations, because it was no use establishing a college in Delhi or in any other central area unless they were sure it would attract a sufficient number of students. The proposal to found a Normal college or a training college had already been put to the heads of minor administrations, and the Chief Commissioner of Delhi, the Chief Commissioner of the North-West Frontier Province and the Chief Commissioner of Ajmer-Merwara had informed the Government that at the present moment they did not feel the want

of a central college of this kind. Moreover, the Committee the Government proposed to set up would undoubtedly go into the question of the adequacy or otherwise of the existing facilities for the provision of teachers, and if they considered it desirable to have a central training college or to multiply the Normal training schools, the Government of India would undoubtedly bestow upon the recommendation exactly the same attention as they would upon the other recommendations of the Committee. Mr. J. C. Chatterjee wished to withdraw his resolution, but the House passed it as amended by Mr. Mukhtar Singh's amendment.

* * *

During the Autumn session considerable feeling was aroused in regard to newspaper and other comments reflecting on the dignity and partiality of the Chair. The effect, however, was speedily removed, and the President in concluding the incident appealed to every member of the House to forget the incidents which had been responsible for the atmosphere of distrust and suspicion calculated to lower the dignity and prestige of the House which, as the President observed, was the primary concern of every member.

The interval between the Autumn session of the legislature and the Winter session, which opened in Delhi on January the 28th, was fully occupied by the many and varied political activities narrated earlier in this chapter. Normally, the chief interest of the Delhi session is provided by the Railway and General Budgets and the discussions on them, but the excitement engendered by the discussion connected with the Public Safety Bill in the Autumn session in Simla, coupled with the knowledge that when the Bill came again before the Assembly the opposition meant to make it a first class trial of strength between themselves and the Government, gave to it a greater share of the interest of the session than that claimed by even the General Budget. Also, a Bill to regulate the course of trade disputes in India was due to come up in the Delhi session, and this proved to be second only to the Public Safety Bill as a focus of interest and as a ground for another trial of strength between the Government and the opposition. The General Budget was not expected to contain anything very spectacular, and, therefore, these two bills, namely the Public Safety Bill and the Trades Disputes Bill, were regarded as the crux of the busi-

ness of the session. An account of the proceedings connected with these bills will, however, have to be deferred till next year as they came up before the Legislature after the expiry of the period with which this report deals.

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The Delhi session opened on January the 28th with an address by His Excellency the Viceroy, which, on account of the great importance of its contents, and its serious reflections on the broad issues of politics in this country, attracted considerable attention both in India and outside.

After referring to His Majesty the King Emperor's illness, the upheaval in Afghanistan and the Hilton Young Report on East Africa, His Excellency announced the Government of India's decision to establish a Central Council of Agricultural Research, which would comprise a governing body, presided over by a Member for Agriculture, and consisting of seventeen of the members, of whom two would be chosen from the Assembly, one from the Council of State, nine nominated by the Governments of the nine major provinces in India and an Advisory Council of 39 members to give expert advice to the governing body and submit for its approval programmes of research enquiry. His Excellency next touched on internal politics and announced that His Majesty's Government had decided to appoint a Royal Commission to undertake an enquiry into India's labour problems with due regard to the economic position of the industries in India and to explore all aspects of the problems affecting the conditions under which industrial labourers work. Mr. Whiteley, formerly Speaker of the House of Commons, had been selected as Chairman, and the personnel of the Commission would be announced later. Referring to the broader features of the Indian political situation Lord Irwin said that it was as much unprofitable to deny Parliament the right to form a free and deliberate judgment as it would be short-sighted of Parliament to underrate the importance of trying to reach a solution which might carry the willing assent of political India. "And it is at this stage", His Excellency continued, "while we can still have no means of knowing how these matters may emerge from the Parliamentary discussions, that it is proposed to destroy all hope of peaceful and orderly progress towards agreement, unless, by a fixed date in time, Parliament should have accorded its approval to a particular solu-

tion, the result, no doubt, of earnest effect to grapple with an exceedingly complex problem, and as such entitled to serious consideration, but one which important sections of opinion in India have not accepted, and which was reached through deliberations in which Parliament had no part or voice. Such procedure savours rather of intolerance and impatience than of the methods of responsible statesmanship, and would reduce Parliament to being a mere registrar of the decisions of other persons. That position, of course, is one that in justice to its own obligations Parliament could never accept. * * * * In a situation that must call essentially for qualities of confidence on both sides, and for free exchange of opinion on terms honourable to all, I see very clearly that nothing but harm can flow from a threat that, unless a particular condition is fulfilled, which I believe to be mechanically impossible of fulfilment from the outset, an attempt will be made to plunge the country into all the possible chaos of civil disobedience. * * * * In conditions more favourable to cool judgment, I suppose that most persons would admit that British India, as we find it to-day, is a British creation, and that it is the British power which has, during the last century, held together its constituent parts. If this centripetal influence is immediately or too suddenly withdrawn is it wholly unreasonable to fear that some at any rate of the parts might fly asunder, and the dream of a strong united India would vanish and be destroyed?" Concluding, His Excellency the Viceroy addressed a special message to those who doubted the British pledge given by the late Mr. Montagu, and said "I tell this Assembly again, and through them India, that the declaration of 1917 stands and will stand for all time as the solemn pledge of the British people to do all that can be done by one people to assist another to attain full national political stature, and that the pledge so given will never be dishonoured. And, as actions are commonly held more powerful than words, I will add that I should not be standing before you here to-day as Governor General if I believed that the British people had withdrawn their hand from that solemn covenant. Those, therefore, who preach that a new generation has arisen in England which seeks to explain away the significance of the 1917 declaration, are, consciously or unconsciously, but not the less really, misrepresenting the purpose of Great Britain, and poisoning the wells by which the common life of India and Great Britain

is supported and sustained. If there are Indians who are thus tempted to mistrust Great Britain, there are, no doubt, many in Great Britain, resentful of what they well know to be an unfounded and ungenerous accusation, who may mistrust some of those who speak for India. But if we are thus tempted in the 20th century, I know that both India and Great Britain will be judged in the 21st by the degree to which they have refused to lose faith in one another."

Before the Legislative Assembly turned to the formal business of the session, leaders of every part in the House gave expression to the general regret at the deaths, since the last session of two of its distinguished members, the late Lala Lajpat Rai, and the later Mr. S. R. Das, Law Member of the Government of India.

* * *

In last year's report we gave a somewhat full account of a Child-Marriage Bill introduced in the Legislative Assembly by a Hindu member of the Nationalist Party, Rai Sahib Harbilas Sarda, and it may interest readers to have further news of this bill. As originally presented to the Assembly it contained certain features which the Government regarded as unworkable and by agreement between them and Rai Sahib Harbilas Sarda, some alterations were made and the Bill came up again in Delhi on January 29th. But, since the last discussion on the bill had taken place, the Age of Consent Committee, to which reference was made in the preceding chapter, had been formed to examine and report on a question which will be at once recognised as very intimately connected with the subject of child-marriage. The Government, therefore, strongly held the view that it would be unwise to proceed with the Child-Marriage Bill until they and the Assembly were in possession of the report of the Age of Consent Committee. The Report is expected in the summer of 1929, and the Home Member gave an undertaking that full time for the discussion of the Bill would be allotted during the session of the Assembly in Simla, in the autumn of 1929, and therefore he felt compelled to vote against the motion that the Bill be referred to a select committee forthwith. The proposal for reference to a select committee was, therefore, rejected.

On February the 4th the fight over the Public Safety Bill opened again in Delhi, and, as before, an unusually long debate

ensued, which, like its predecessor in Simla, extended over four days.

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Between this debate on the Public Safety Bill and the presentation of the Railway Budget on February the 19th, only one item of the business of the Assembly calls for notice, and that is a debate on a resolution moved by a member of the Congress Party concerning the circumstances of Lala Lajpat Rai's death. The original resolution expressed resentment at the reply given by Earl Winterton on the 26th November, 1928, to questions from certain members of the Labour Party regarding the circumstances of Lala Lajpat Rai's death, recorded the belief of the Assembly that the Lala's death was accelerated by the injury he received from the police, and condemned the official enquiry held by the Punjab Government into the affair. To this, Munshi Iswar Saran, a member of the Nationalist Party, moved an amendment saying that in place of the original resolution the Governor-General-in-Council be pleased to appoint a committee consisting of official and non-official members of the Legislative Assembly to enquire into the allegations which had been made in connection with the death of Lala Lajpat Rai. Munshi Iswar Saran moved his amendment in a moderate and well-reasoned speech. He recorded the facts of the case, stated that no proper enquiry had ever been held into the question whether the police assaults had accelerated Lala Lajpat Rai's death, since the Punjab Government's enquiry had been held before that event, and declaring his belief in the sincerity of the expressions of regret made by Government spokesmen at various times since Lala Lajpat Rai's death, asked what reason there was for refusing the enquiry he demanded. Pandit Madan Mohan Malaviya, leader of the Nationalist Party, and Raizada Hansraj, a member of the Congress Party, gave the Assembly an account of their own personal experiences of the events on the day when Lala Lajpat Rai had been injured. The Home Member maintained that the Punjab Government's impartial enquiry had established the fact that the police acted within their instructions, and said that both the Punjab Government and the Punjab Legislative Council, who were primarily concerned, had satisfied themselves on this point. He stated that no *primâ facie* case had been made out by Pandit Madan Mohan Malaviya and Lala Hansraj, whose impressions of the incident were, no doubt,

honestly formed, but were incorrect. He refused to be a party to the political victimisation of officers and men who had performed a difficult and delicate duty. Mr. Jinnah, Mr. Jayakar and Pandit Motilal Nehru attacked the Home Member's speech strongly, particularly that part of it in which he said that no *primâ facie* case had been made out when certain serious allegations had been made by two responsible members of the Legislative Assembly who were actually eye-witnesses of the whole affair. The amendment was first put to the vote and was declared carried by 57 against 45.

* * *

The major portion of the winter session of the Legislative Assembly is occupied by the presentation and discussion of the Railway and General Budgets. The contents of these two budgets will be fully discussed in the chapter dealing with the finance of India, and may, therefore, be ignored for the present. The general debate on the budgets, and the debates on motions for particular grants in connection with them, provide opportunities for a comprehensive survey or criticism by the members of the Legislature of the work of the Railway Board and of the doings of the Government in the general administration of the country, an opportunity of which the members seldom fail to make the fullest use.

The Railway Budget was presented to the Legislative Assembly on February 19th, and the general discussion of it began on the 21st. Sir Purshotamdas Thakurdas, representing the Indian Merchants' Chamber, opened the debate with a critical speech which dealt with a variety of questions, including the education of the children of the railway staff, the appointment of an Indian to the Railway Board, the Railway Advisory Committees, and the cheapening of rates and fares. He opined that the time was ripe for the establishment of a Railway Rates Tribunal in India, and that company-managed lines should fall into line with State-managed ones. Mr. R. K. Shanmukham Chetty, a leading Swarajist, followed and pleaded for a revision of the maximum and minimum railway rates because in his opinion too much latitude was allowed to the railway administration. After several other speakers had given their views, Sir George Rainy, in replying to the debate, said that he appreciated the importance of the questions, but that relating to the appointment of a Rates Tri-

bunal was one for consideration by the Separation Committee. With regard to reductions in rates and fares he showed by facts that reductions had not been confined to State-managed railways by any means. Answering Sir Purshotamdas Thakurdas, Sir George Rainy promised to issue a pamphlet to the Assembly Members giving a summary of the proceedings of the various Local Advisory Committees. He also announced the Government of India's intention to appoint Mr. A. M. Hayman, Controller of Railway Accounts, as the fifth member of the Railway Board if the Assembly agreed to the creation of the appointment.

The second stage of the discussion of the Railway Budget—the list of demands—opened on February 23rd with a motion by Sir George Rainy for the grant of Rs. 12,61,000 in respect of Railway Board charges. Mr. Jamnadas N. Mehta moved an amendment for a reduction of Rs. 64,000, being the expenditure on account of an additional member on the Railway Board and his establishment. Thereafter, eleven motions for cuts of sums ranging from Rs. 14,000 to Rs. 100 were moved, but all were either negatived or withdrawn, the original amount of Rs. 12,61,000 being passed on February 27th after four days' debate.

As during all the four days allotted for the voting on demands the discussion centred round the demand in respect of the Railway Board charges, the other demands—fourteen in all—for the grant of various sums to defray the charges which would come in course of payment during the year ending 31st March, 1930, were put by the President and passed by the Assembly without discussion.

* * *

The General Budget was presented to the Legislative Assembly on February 28th by Sir George Schuster, the Finance Member. The general discussion began on March 4th and that on the demands for grants on March 7th. The subject of India's finances is referred to at length in chapter VII, so that beyond a few remarks on the Army grant there is no necessity to say anything further at this stage on the General Budget.

March 14th was absorbed with the discussion of the demand relating to the Army Department, which Mr. C. S. Ranga Iyer moved should be reduced to one rupee. There was little or no interest in the debate, and after Mr. Ranga Iyer's lengthy speech the Army Secretary replied, and the motion was negatived without

a division. Certain other motions were then moved, two of which were carried against Government. One of these was for Rs. 100 at the instance of Colonel Gidney, who dealt with the grievances of temporary I.M.S. officers, and the other was by Mr. Munshi, who complained of the exclusion of Burmans from the Indian Army. The President then put to the House the motion that a reduced sum of Rs. 5,35,800 be granted in respect of the Army Department. The debate was concluded on March 15th after the Government's military expenditure and policy, and particularly the Indianisation of the Army and the opportunities available for enabling Indians to obtain military training, had been strongly criticised by various party leaders and adherents. The motion for the grant of Rs. 5,35,800 to the Army Department was rejected by 61 votes to 44.

Another debate of considerable interest began when the demand relating to the North-West Frontier Province was taken up and Mian Shah Nawaz moved a cut of Rs. 100 on the question of the introduction of reforms in the province on the lines of other provinces. He was particularly anxious to know whether the Government had recommended the grant of "moth-eaten Morley-Minto Reforms". Sir Denys Bray, the Foreign Secretary, pointed out that the delay on the part of Government in dealing with the Frontier Committee's Report was a triumph of statesmanship over communalism, and was in accordance with Pandit Malaviya's advice in a previous debate. The motion was eventually carried against Government, and the balance of the grant was sanctioned without a division. All the remaining grants were voted without a division under the guillotine procedure.

* * *

The outbreak of industrial unrest on a large scale after the War led the Government of India to explore the possibility of providing some machinery for the settlement of industrial disputes. The question was taken up in 1919, but after consultation with the local Governments the Government of India came to the conclusion that at that time any legislation of the kind was likely to be ineffective. The succeeding years saw a distinct change in the position by reason of the growth of organisations of industrial workers and of the increasing influence exercised by public opinion on the course of disputes. Consequently the Government of India took up the matter again in 1924. As a result of extensive enquiries made in

1924-25 and the experience which became available since that period it became apparent that legislation for the prevention and settlement of trade disputes was likely to prove of considerable value. The Trade Disputes Bill was accordingly introduced in the Assembly on September 4th, 1928, and circulated for the purpose of eliciting public opinion thereon. On the 11th February, 1929, Sir Bhupendranath Mitra moved that the Bill be referred to a Select Committee, emphasising that the recent Bombay mill strike had involved the loss of over 21 million working days and 3½ crores of rupees in wages alone. The Bill proposed to set up two types of machinery, namely, Courts of Inquiry and Boards of Conciliation. The former was intended to investigate and report on such questions connected with the dispute as might be referred to them, and the latter to secure, if possible, a settlement of the dispute; but the object of both was to mobilise public opinion in order to prevent or to shorten industrial disputes. The Bill also penalised lightning strikes in public utility services. This provision was based on the principle that persons whose work is vital to the welfare of the community generally should not be entitled to enter into a strike before sufficient time has been given to examine the merits of their grievances and to explore the possibilities of arriving at a peaceful settlement. Finally, the Bill declared illegal strikes and lockouts which had other objects than the mere furtherance of a trade dispute within the industry to which the strikers or employers belong and which were also designed to coerce Government either directly or by inflicting hardship on the community. The Bill emerged from the Select Committee with some modifications, but with its principles unaltered. The notable changes made by the Select Committee were that it restricted the duration of the measure to a period of five years and inserted a provision penalising a lockout in a public utility service if declared without giving previous notice to the employees. As the Bill was not taken into consideration in the Assembly until April 3rd, 1929, its discussion will more appropriately fall within the purview of next year's report.

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On the afternoon of the 28th March, 1929, Sir B. L. Mitter, Law Member to the Government of India, in the absence through illness of the Home Member, moved that the Public Safety Bill, as reported by the select committee, be taken into consideration

His speech was a formal one, and after he had been followed by Mr. Jayakar, Deputy Leader of the Nationalist Party, who asked for postponement of further consideration of the Bill, the President announced that if the Government were not prepared to accept Mr. Jayakar's suggestion he would call upon Mr. Jogiah to move his adjournment motion. The Assembly then adjourned for the Easter Holidays, and did not re-assemble until after the close of the period under review.

CHAPTER III.

State and People, Country and Town.

Although the economic conditions under which large sections of the population, rural and urban, of this country have to live are bad, the following pages will clearly demonstrate that ameliorating processes are at work throughout the land, and that the standard of living is slowly rising, though it may be said to be almost imperceptible. Students of Indian affairs too often forget that the task which faced the British Government in India when the period of expansion came to an end was, to quote Macaulay, " the stupendous process of the re-construction of a decomposed society." For thirteen hundred years after the White Huns laid Taxila in the North-West in ruins, India's political fabric was repeatedly smashed, and the life of her different kingdoms and peoples stunted and crippled until the rise of the British power. When Lord Lake came to Delhi, over a century ago, to protect the Moghul Emperor against the Maharattas he found the social life of districts within sight of the Delhi walls still disintegrated after the horrors of Nadir Shah's invasion fifty years earlier. Over immense tracts of India similar conditions prevailed before the coming of the Pax Britannica. From that point some hint of the vastness of the scope and complexity of the early British task in India begins to emerge. Not only had some framework of government to be devised and erected, not only had some administrative departments to be created and their subordinate personnel educated and trained, but over vast areas the conditions under which civilisation could live had to be restored. In this and the succeeding chapters the mere recital of the works of the different departments and agencies of the Government of India and the provincial governments will show how vastly different is the environment in which they function to-day from that in which the earlier British Administrators lived their lives and did their work.

* * *

India is a country of continental contrasts. Bounded on the North by the stupendous mass of the Himalayas and on the North-West and North-East by lesser but still gigantic mountain ranges, with the rest of her perimeter washed by the sea, India can show

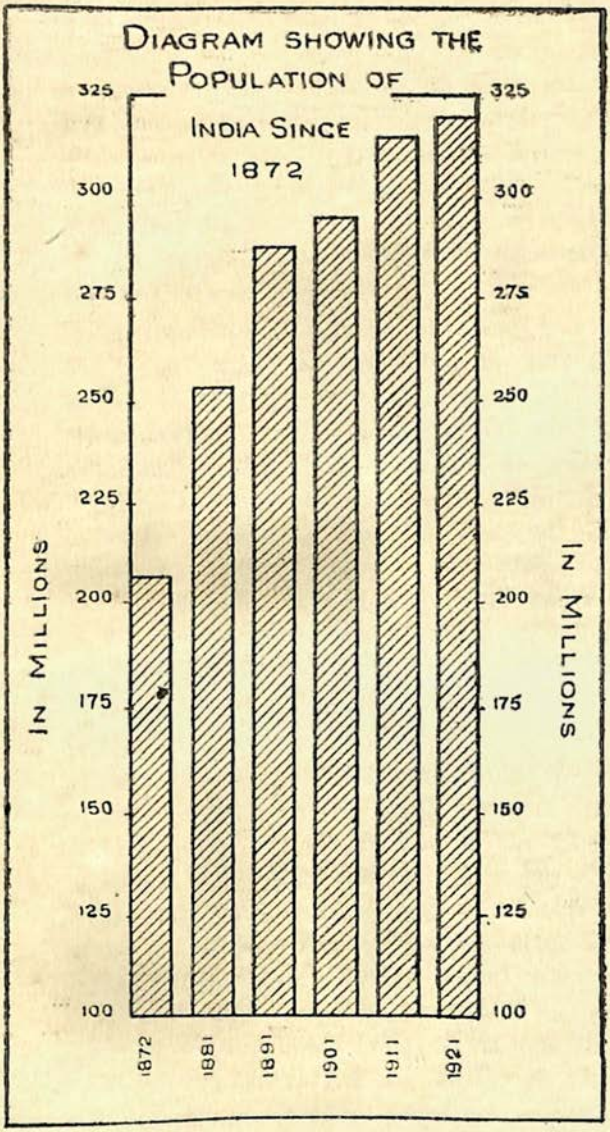
the greatest extremes of fertility and barrenness, rainfall and drought, of highly developed and up-to-date industries, and agricultural methods and implements, some of which are as primitive now as they were when Alexander came into the Punjab. Extraordinary contrasts in natural and agricultural conditions can be encountered within a few miles of each other, and there are many places from which a day's ride will transport the traveller from among the people of one physical type, speaking one language, to surroundings where people of quite a different stock speak another language, entirely unintelligible to their neighbours a few miles away. Crops of the temperate zone are cultivated and form the staple food of the people of one part of India, whilst in another part the crops of tropical countries are grown and consumed. There is a world of difference between the stony starveling plots, terraced with infinite labour among the barren rocks of the Western Punjab Hills, and the fat rice and jute fields of Bengal, and there are just as great differences between the people who till them, whilst between these extremes lie numerous gradations of climate and soil with cultivation dependent on canal, well, or tank irrigation, or on rainfall more or less abundant. In short, it needs the colossal gazetteer of the Indian Empire to give a full account of the innumerable conditions and circumstances of our great subcontinent. But, in spite of all this, it is possible to make one or two generalisations which are true of all India, and the first is this: India is primarily a land of small villages and tiny hamlets; towns are few, and of great cities there are but rare specimens. There are fully half a million villages in India, and of these, immense numbers are diminutive clusters of mud-huts, microscopic in scale when compared with the immensity of plain or mountain in which they are set. Only a very small proportion of these villages are touched by the railway or by metalled roads. The vast majority of them are approached by unmetalled roads or winding paths between the fields, the former usually impassable, or almost impassable, by wheeled traffic after rain, whilst the latter cannot afford passage to a wheeled vehicle at any time. In the next chapter will be found certain figures relating to the mileage of roads of different kinds in India, and from them the reader will be able to form some sort of a mental picture of the paucity of first class roads in this country. The Government of India, through their Railway Board, are steadily extending the number and mileage of their branch lines, but the size of India ensures that it will be long before her

surface is covered with a network of lines anything like as close and complete as the railway systems of the West of Europe. For long years to come the villages in many parts of India must continue remote from railway or roads.

Estimates of the percentage of the total population of India which is engaged in agricultural and pastoral pursuits vary slightly, but it cannot be very different from the 73·9 per cent. at which it stood when the census of 1921 was taken. There are some reasons for supposing that the percentage of urban residents in India has risen during the seven years which have elapsed since the census was taken, but we shall be safe in assuming that it is roughly 11 per cent. of the whole. A moment's consideration of these figures will show that the portion of India's agricultural produce which is consumed in the towns is small as compared with the total production. Generally speaking, therefore, the villagers produce for their own consumption, and historic, economic, and social conditions which have persisted through long ages have developed the self-sufficing type of agriculture which we find in India to-day. In other ways, too, the Indian village is as a rule self-contained. Land-owners, whether cultivating all or a portion of their lands, or letting them out to tenants; tenants—some with permanent rights in the land, others with only yearly rights; agricultural labourers who are often members of different castes from their masters; artisans with their simple traditional skill, and village menials and shopkeepers, all form an ordered hierarchy and make up the self-contained and primitive, yet interesting and often surprisingly intricate economic system of the typical Indian village.

But although agriculture is far and away the greatest and the most important industry in India, and although the people engaged therein compose the vast majority of her population, it must not be forgotten that industries in a more technical sense, the industries of the factory, the iron works, and the vast transport systems, are becoming increasingly important factors in the economic life of this country, and the workmen employed in them are growing continually in number. The census of 1931 will give us some information on this subject of the increasing industrialisation and urbanisation of India. At present all that we can do is to draw attention to it as one of the many elements of Indian economics.

A few statistics will show how preponderantly rural is the Indian scene. The total population of India, including all the Indian states and Burma was, according to the 1921 census,



REASONS FOR INCREASE OF POPULATION

PERIOD	INCREASE DUE TO		REAL INCREASE OF POPULATION	TOTAL	RATE PER CENT OF REAL INCREASE
	INCLUSION OF NEW AREAS	IMPROVEMENT OF METHOD			
	MILLIONS	MILLIONS	MILLIONS	MILLIONS	
1872 - 1881	33·0	12·0	3·0	48·0	1·5
1881 - 1891	5·7	3·5	24·3	33·5	9·6
1891 - 1901	2·7	·2	4·1	7·0	1·4
1901 - 1911	1·8	-	18·7	20·5	·6·4
1911 - 1921	·1	-	3·7	3·8	1·2
TOTAL	43·3	15·7	53·8	112·8	20·1

318, 942,480. Of this number, less than 8¼ millions lived in towns with a population of 100,000 and upwards, of which there were 35. Roughly 3½ millions lived in 54 towns, whose population numbered between 50,000 and 100,000. Apart from these, less than 21 million people lived in places which can be called towns, even if we include in the latter category what are really villages with populations of less than 5,000. A writer, therefore, who sets out to give an account, however unsubstantial it may be, of the general economic condition of the Indian people will be pardoned if he visualises his task as being primarily concerned with the condition of the agricultural population consisting largely of an immense number of small holders.

A little while ago we referred to the still primitive condition of agricultural implements and methods and to the continued existence of traditional conditions of life in the Indian villages. But, although the lives of the villagers in so many of these villages are lived remote from the modern world of industry and highly organised communications, it is impossible that they should be entirely unaffected by the immense changes and developments which have taken place in the world during the past few decades. The spread of railways and roads in India has done much to break down the ancient isolation of her villages and a majority of her people must at any rate have seen motor cars, whilst millions of them have actually ridden in them at some time or other. Travel, that great medium of education, is becoming yearly cheaper, and more accessible, whilst thousands of Indians, even from the remotest hills and thickest forest, travelled overseas and saw something of the world during the Great War. In a word, new ideas are at work in the Indian villages and, there can be no doubt, with continually increasing effectiveness. The paucity of urban areas in India, the foci and disseminators of civilization and liberalizing ideas, is of course a drawback, and slows down the pace of progress. But even this is not an unmixed evil, for the too violent or unrestrained impact of new ideas on a social and economic system so conservative and firmly rooted in tradition as that of the Indian village, would certainly produce many undesirable effects. In the Indian village system, largely self-sufficing and self-contained as we have seen it to be, there is much that ought to be preserved, and it should never be forgotten that the Indian village is also largely self-governed. The village headman, and in these modern days the village panchayats of the new local self-govern-

ment model, responsible to and partly controlled by outside authorities though they are, must of necessity be responsive to village opinion.

The influences which are at present working to bring the Indian village system more closely into touch with modern conditions and the great world outside are of different kinds. As time and space dwindle under the assaults of mechanical inventions, and the progress and development of communications of all sorts, the phenomena of the modern world are brought nearer to the vision of the Indian villagers. Industrial products which their fathers never knew are being used by them, and some of these have already become necessities of life, transforming habits and improving standards of living. And when wireless broadcasting becomes a welcome and familiar feature of the villagers' day, as it will do if it is fostered by the Provincial Governments, nothing short of a revolution will quickly be worked in his ideas and his outlook on life. Progress moves more quickly in these days than ever before, and its pace is all the time accelerating. In the future changes, even in India, will be traced not over centuries or generations, but over decades.

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Another strong force working to change the conditions of life in the Indian village and to enlarge the villagers' ideas are the changes which have taken place in late years in the administrative system of British India. Post-Reform developments in local self-government in this country have given the villages a new status and their residents new interests and functions. Village Panchayats, Union Boards and other small administrative units give the people on the soil the opportunity to perform a number of useful or indispensable duties for themselves. These include the supply of water for domestic use, the cleansing of public roads, drains, tanks and wells, and other public places or works in the village. They also include the carrying out of certain minor works such as the construction of local roads, drains and bridges. Sanitation, conservancy and certain functions in respect of the preservation and improvement of the public health also come within their scope. The various village committees also control grazing lands and the lighting of the village and, in addition, are empowered to try certain trivial offences. Thus, the importance of the village in the administrative scheme is now being emphasised, and it is being brought into

closer touch with the administrative authorities of the districts and provinces. All this sort of work is educative experience of much value and tends to develop interests in things beyond the village boundaries and to broaden ideas and experience generally. The great progress in education, particularly primary education, which has taken place of recent years, is also working in the same direction. The mere ability to read inevitably puts within the villagers' reach the means, and very often the incentive, to know something of what goes on outside his immediate neighbourhood.

But of all the influences now at work to modify the conditions of Indian rural life, perhaps, none are stronger than certain economic influences, both internal and external, now at work in all parts of this country. Of the internal economic influences, something has already been said, for they both show themselves in, and work through, the various kinds of communications which are yearly creeping over India's surface. Roads and railways mean markets, and markets mean the stimulation not only of agriculture, but of industries also. And so it is not surprising to find small industries now springing up all over the countryside or to notice a marked tendency for the primary manufacturing processes of agricultural products to extend to the small towns and even to the larger villages. As the traveller drives about the country now, he will hear frequently from many of the villages which he passes the sound of a little engine working, a sugar-cane crusher, an oil presser, a little rice hulling mill, and so on. This development has far-reaching effects, for it is providing an outlet for the surplus money of the local money-lender, it gives employment to cultivators and labourers, particularly during the periods when agricultural operations are at a stand-still, it provides markets for local agricultural and dairy products, and it is yet another influence at work broadening the ideas and the experiences of the villagers.

External economic influences are also working powerfully to change the conditions of village life. Surplus harvests can now be marketed, and the Indian " money crops "—tobacco, oilseeds, jute, cotton, tea—are assuming ever-increasing importance in the world supplies of these commodities. This, in turn, means that the standard of quality of India's supplies must be equal to that of similar supplies from other countries, which in turn means that Indian agricultural methods must constantly improve in order to keep abreast of improving world standards. Agents for improved agricultural appliances, fertilisers, and other commodities of use

in agriculture are constantly extending their scope and establishing themselves in places which they would hardly have thought of visiting some years ago. It would be easy enough to exaggerate the influence exercised by this connection between Indian agriculture and the world market, but we must guard against doing so. At present, a very small percentage of Indian villages are affected directly by this connection, but their number will grow steadily and perhaps rapidly as time goes on.

There are, therefore, many signs of change and progress in the Indian villages, even though it may be possible to point to hundreds or thousands of villages in which no perceptible change of any sort has taken place within the memory of living men. Economic, administrative, educational, and other developments are, in spite of all denials, slowly permeating the whole of the Indian rural economy, altering the conditions of the villagers life, little though he may realise or appreciate it, widening his interests and broadening his mental outlook, and, it may on the whole truthfully be said, improving his material prospects.

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No one whose direct acquaintance with India extends over a period of twenty or thirty years will have any hesitation in saying that India has prospered during that period, and if evidence were asked for, a number of unmistakable signs can be pointed out. In 1913 India ranked sixth among the trading countries of the world, and by 1925 she had attained to the fifth place—a fact which is not generally recognised to-day. Year by year her exports and imports have steadily climbed almost without a pause, except during the War, for well over half a century. Fifty years ago India's exports of merchandise were valued at approximately sixty millions of rupees, but in 1925 they almost reached four thousand millions. Precisely the same story can be told regarding India's imports, which rose from forty million rupees in 1874-79 to nearly three thousand millions in 1925-26. These are convincing figures, and the fact that they continue to rise is a reasonable ground for predicting a still more important place for India in the future. Let us go a step further. In the year 1926-27 India exported cotton manufactures, including twist and yarn, to the value of 107½ millions of rupees, whilst her exports of manufactured jute were assessed at nearly 532 millions. Additional evidence of India's prosperity can be had from the railway statistics, which show that

even the poorest classes of the people can afford to travel much more than in the past. India's masses, too, are now enjoying vast quantities of cigarettes, mineral waters and other simple luxuries, all pointing to the fact that the standard of living among the Indian masses is slowly but surely rising. The membership of co-operative societies is continually increasing, as also are the Savings Bank deposits, showing that more and more of the people are able to save money and thus prepare for those hard times which are inevitable at irregular periods in a country like India. Broadly speaking, India exports raw materials and food-stuffs and imports manufactured goods, and a very large part of her trade balance is always liquidated by imports of bullion, and this—when it is not hoarded—is available for circulation and for the stimulation of trade and industry. It is eminently satisfactory to find that there is an increasing power of resistance to famine or scarcity among the masses in India. So far as the agriculturist is concerned one reason for this can be found in the greatly increased value of land, which is far greater than the rise in the price of grain which has taken place during the last few decades. Registration of rates in land, internal security, the extension of irrigation and communications of all kinds have contributed to make land a much more valuable possession than was the case many decades ago. The rise in the value of land as a basis of credit, however, would be of little use were not sufficient liquid capital available to provide credit, and it is here that we see one of the most valuable and beneficial results of the development of markets both in India and abroad. The development of markets, both internal and external, for Indian products is intimately bound up with the development of communications of all kinds—land, oceanic and aerial. Other results of the highest importance follow from all this. The increased outlet for Indian agricultural products provided by the growth of markets encourages the Indian agriculturists to extend in some places the area of their cultivation and to put something back in the way of fertilizers into their land and to improve their equipment and methods in a way which was not possible in the past. The spread of communications, the growth of markets, and the sale of crops has already done a great deal to transform the economic conditions of the Indian agriculturist, and so to-day we find that he possesses a greatly increased capacity to resist famine or scarcity. Famine in India to-day can never cause the appalling havoc which it did before the growth of railways and

roads since food-stuffs can be rapidly conveyed to any part of the country by rail, road or air almost immediately. The chief hardship which famine would cause in India to-day would be lack of employment, and therefore of purchasing power, since the petty cultivator and agricultural labourer would be deprived of their livilihood for such time as famine conditions last.

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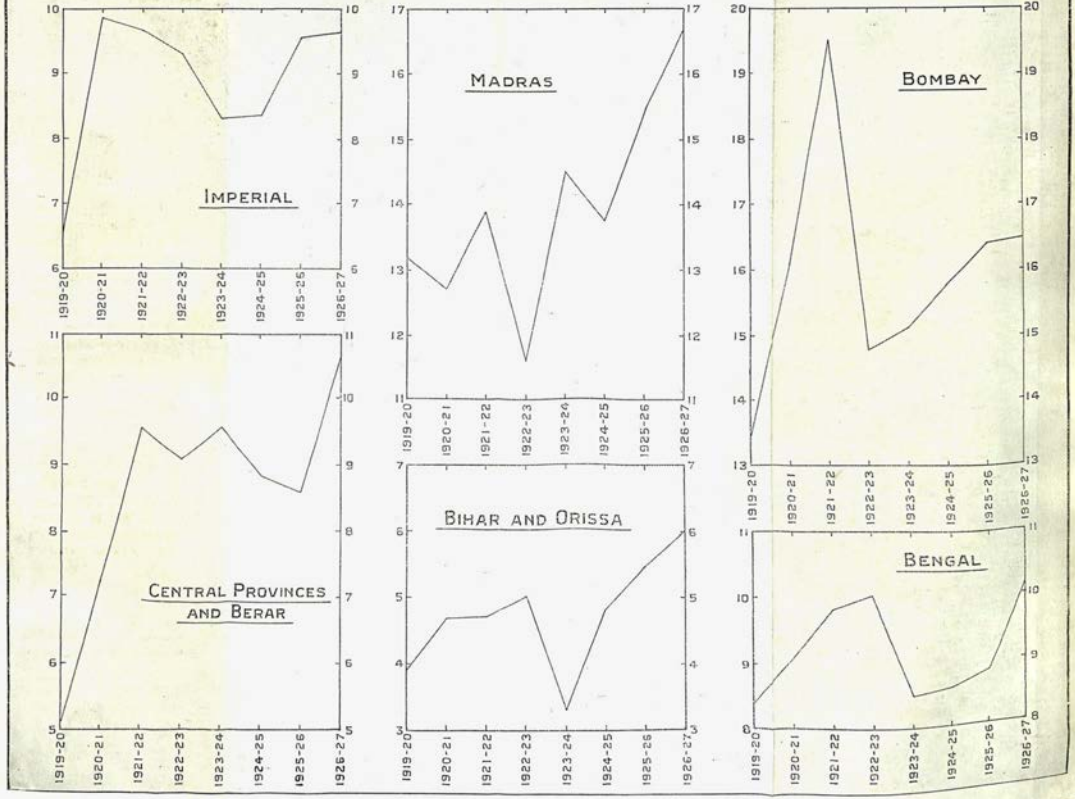
Although an appreciable improvement has taken place in the standard of living of the Indian agricultural masses during the past quarter of a century this only represents the genesis of what has yet to be accomplished. There is a vast amount of what can only be termed dangerous poverty in the Indian villages—poverty that is of such a kind that those subject to it live on the very margin of subsistence. This may be taken to be the normal state of the millions of agricultural labourers who own land themselves, and whose income consists mostly of customary wages paid in kind. When these people live in the neighbourhood of towns they can often help themselves during the slack periods in agricultural operations by labouring for wages in the town, but it will be realised, after reading what has been said above, that this resource is not open to more than a small percentage of Indian agriculturists. The land-owners, even the owners of small fragmented holdings, are in a better position than the agricultural labourers, because they, at least, have something on which they can raise credit. But this power to raise credit is all too often their undoing, for they get into the hands of the money-lender. In innumerable instances a man inherits the debt of his father, which keeps him tied to the money-lender and rivets the fetters still more closely. However prudent and thrifty the Indian small-holder may be, it is very difficult for him to keep out of debt. The Indian agriculturist has, as a rule, no resources, on which to fall back in bad times. Even at the best of times he has to wait for six months for the return for his labour and expenditure. Of late years much has been done to release the Indian agriculturist from his state of constant indebtedness, but the process is one of immense complexity and difficulty, and cannot be expected to show results very quickly. The best and the most effective way to tackle the problem of rural indebtedness is to multiply and extend the operations of sound co-operative societies. The Co-operative Societies Act of 1912 has facilitated the introduction of Village Credit Societies on the

EXPENDITURE OF THE IMPERIAL AND PROVINCIAL DEPARTMENTS OF AGRICULTURE (IN LAKHS OF RUPEES)



Raiffeisen model to replace the money-lender as a source of credit. Recent additions or amendments to the law relating to money-lending have been made by the Government of India and several of the Provincial Governments. The Usurious Loans Act of 1918 allows courts wide powers of interference whenever they consider that the terms of a loan are usurious. The Agriculturists' Loan Act, the Land Improvement Act, and the Land Alienation Act in the Punjab are all specimens of legislation designed either to keep the agriculturist out of debt or to save him from the worst rigours of his position. It must be confessed, however, that these legislative measures have not done much to achieve their object, and this fact increases the importance of the work which the Co-operative Societies are now doing in this country.

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In addition to these economic distresses the Indian villager normally finds himself bound in a chain of circumstances adverse to his welfare and prosperity. In the first place, innumerable villages all over India are foci of preventible disease which causes immense economic wastage. No survey of the conditions under which the Indian agriculturist lives and works can ignore this vitally important factor. The following quotation from a resolution passed at the All-India Conferences of Medical Research Workers held in 1926 will enable the reader to understand what the ravages of disease mean to India in terms of economic loss:—

> " This Conference believes that the average number of deaths resulting every year from preventible disease is about five to six millions, that the average number of days lost to labour by each person in India, from preventible disease, is not less than a fortnight to three weeks in each year, that the percentage loss of efficiency of the average person in India who reaches a wage-earning age is about 50, whereas it is quite possible to raise this percentage to 80 or 90. The Conference believes that these estimates are understatements rather than exaggerations, but, allowing for the greatest possible margin of error, it is absolutely certain that the wastage of life and efficiency which result from preventible disease costs India several hundreds of crores of rupees each year. Added to this is the great suffering which affects many millions of people every year.

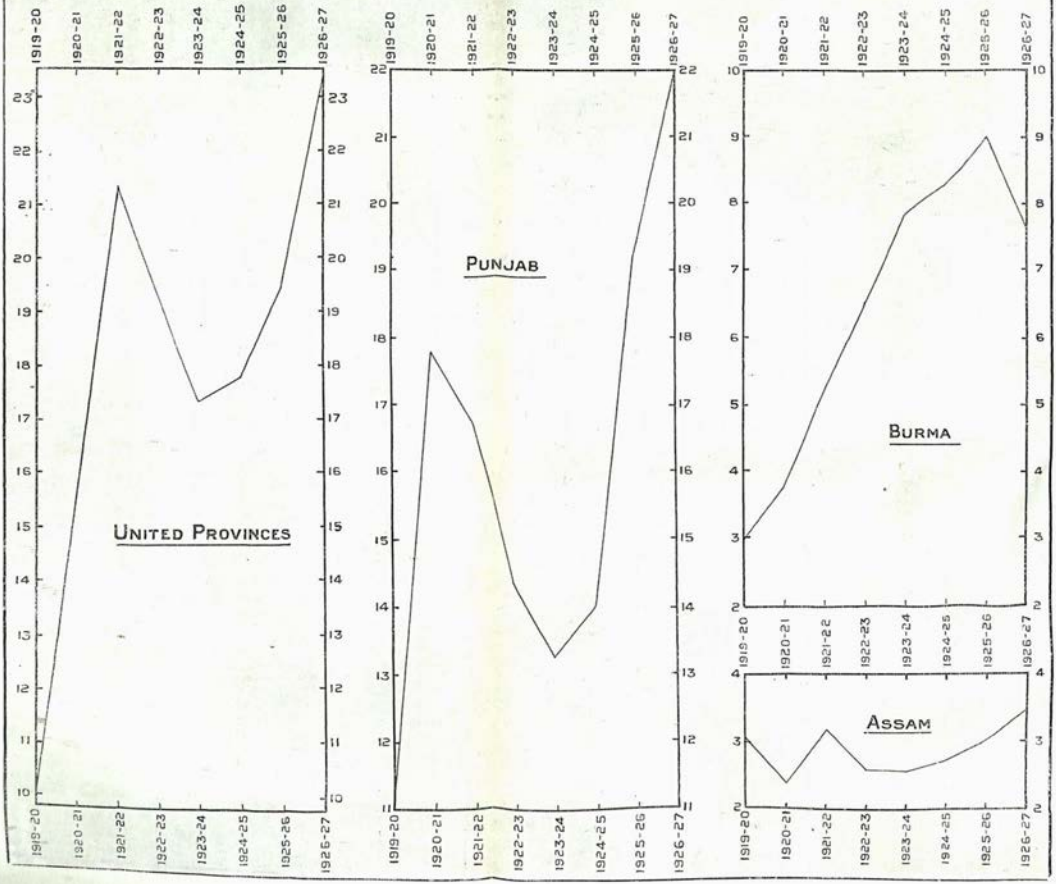
> The Conference believes that the greatest cause of poverty and financial stringency in India is loss of efficiency resulting from preventible disease and, therefore, considers that lack of funds, far from being a reason for postponing the enquiry, is a strong reason for immediate investigation of the questions ".

* * *

Another evil which hampers the development of agriculture in India is the fragmentation of holdings which is almost general in this country. In the south and east of India the average holding is about 5 acres, and elsewhere not more than half the holdings exceed even this small limit. Innumerable are the cultivators whose holdings are one acre or less in extent, and even this tiny area is all too often spilt up into a number of disconnected fragments scattered over the village. Sometimes some of the component parts are so small that the owner cannot cultivate them without trespassing on his neighbour's land. In the Ratnagiri District of the Bombay Presidency individual plots are sometimes as small as the 1/160th part of an acre. Such fragmentation of holdings inflicts immense economic harm on Indian agriculture and attempts are now being made to grapple with the evil. In the Punjab, the Co-operative Societies have for some years been carrying out consolidation of holdings by voluntary methods, and have already achieved some most gratifying results. During the first five years of this work in the Punjab, 39,757 acres were consolidated. In 1925 alone, over 20,000 acres were consolidated, whilst in 1926 no less than 38,000 acres were rescued from fragmentation. In the Central Provinces an officer has been placed on special duty to carry out the work of consolidation, and the Provincial Legislative Council has this year passed the Consolidation of Holdings Act to be applied to one division of the province only, which gives power to not less than half of the permanent right-holders holding not less than two-thirds of the occupied area in a village to combine in a scheme of consolidation which, when confirmed, becomes binding on all permanent right-holders in the village and their successors. The Bombay Government have also framed a bill to deal with the consolidation of land holdings, but it has not yet passed into law mainly because of the opposition of the zamindars in Sind.

Social and religious customs and observances are directly responsible not only for the poverty of innumerable individuals, but also the perpetuation of many of the conditions which give rise to

EXPENDITURE OF THE PROVINCIAL DEPARTMENTS OF AGRICULTURE



poverty in general. Reckless and wasteful expenditure on funerals, weddings and other similar ceremonies account for much of the existing poverty in India to-day. The immense number of religious mendicants of all sorts and the preservation of very large numbers of useless cows are a very heavy drain on the resources of the country. The custom of child marriage again involves a continuous drain on the vitality—and consequently on the economic power—of the Hindu community in particular. Among many classes of the people social tradition prevents the employment of female labour on anything like an adequate scale, and so an economic factor of great importance in all advanced countries is immobilised in India.

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It has already been explained that agricultural and veterinary subjects are now "transferred" subjects, and therefore the Government of India are now divested, except to a very small extent, of all powers of direction and control over the development of agriculture in the provinces. But as no province can at present afford to carry out research on anything like an adequate scale into the many problems presented by their agriculture and animal husbandry, this duty falls to the Agricultural Department of the Government of India. Constituted in its present form in 1906 the Indian Agricultural Service has already left its mark broad and deep on Indian agriculture, and the record of its achievement is one which will not easily be surpassed anywhere in the world. Recruitment to the service having ceased, the provinces are now free to create their own agricultural services, but so far Burma is the only province which has yet framed its rules for recruitment to this service.

* * *

Throughout the year under review Dr. D. Clouston, C.I.E., held charge of the office of the Agricultural Adviser to the Government of India and Director, Agricultural Research Institute, Pusa. He also performed the duties of Liaison Officer between the Royal Commission on Agriculture and the Government of India and the Local Governments up to the 14th April, 1928, in addition to his own duties. The post of Joint Director, Agricultural Research Institute, Pusa, was held by Dr. W. H. Harrison throughout the year.

The Royal Commission on Agriculture in India completed their labours in April, 1928, and their report was published about two

months later. It was clear from the wide ground covered by the recommendations, as well as from their nature, that the first step necessary was to determine the relative urgency of the main recommendations and the authority, Central or Provincial, or both Provincial and Central acting in concert, by which the individual recommendations were to be carried out. The Government of India felt that, if this task was to be completed expeditiously, they must convene a conference representative of all Governments, at which these important matters could be discussed. A Conference was accordingly held at Simla in the first week of October, 1928. It was opened by His Excellency the Viceroy and presided over by the Honourable Sir Muhammad Habibullah (Member for Education, Health and Lands). The main recommendations made by the Commission in regard to research, agricultural education, agricultural improvement, the distribution of agricultural implements, seed and produce, animal husbandry, horticulture, the improvement of statistics and the reorganization of the Agricultural and Veterinary Services were discussed. Provincial representatives explained the action already taken by their respective Local Governments in regard to one or more of these recommendations, and their probable attitude towards those proposals which were still under consideration. While emphasis was laid on the variety, number and financial implications of the Commission's proposals which made the immediate or simultaneous adoption of them impossible, there was unanimity among those assembled as to the desirability of accepting the Commission's report as a basis for rural reconstruction and agricultural advance, and for the progressive application of the main recommendations as the circumstances of each province might permit. As regards the Commission's proposals for re-organising the services engaged in the agricultural and veterinary fields, the general view was that the discretion of the provinces should be left unfettered in respect both of the recruitment and of regulation of the terms of service. The Conference also approved of the principle of promoting and guiding agricultural (including veterinary) research throughout India on a footing of voluntary co-operation between the Government of India and Local Governments through an agency representative of All-India as well as provincial interests, to be set up and financed by the Government of India. His Excellency the Viceroy has since announced the acceptance by the Government of India, though in a modified form, of the recommendation for setting up an

Imperial Council of Agricultural Research. Its duties will be to promote, guide and co-ordinate agricultural and veterinary research throughout India, to train research workers by means of scholarships, and to collate and make available information on research and on agricultural and veterinary matters generally.

The Government of India have decided that the Council should consist of two component parts, a Governing Body and an Advisory Board. The Governing Body, which will be the executive organ of the Council, is to consist of eighteen members and is to be presided over by the Member of the Governor General's Council in charge of the portfolio of agriculture. The other seventeen members will be the Principal Administrative Officer, who will be Vice-Chairman of the Council, nine representatives of the provinces, who will probably be the Provincial Ministers of Agriculture, one representative of the Council of State, two representatives of the Legislative Assembly, representatives of the European and Indian business communities, and two members elected by the Advisory Board. The Advisory Board, whose principal function will be to give expert advice to the Governing Body and to submit for its approval programmes of research enquiry, will consist of 39 members and will be constituted much on the lines proposed by the Royal Commission. As, however, under the scheme, as modified by the Government of India, the representatives of the Council of State, the Legislative Assembly and the European and Indian business communities will be members of the Governing Body, the scientific and university representation on the Advisory Board will be increased.

The Royal Commission recommended that the Council of Agricultural Research should be financed by a lump grant of Rs. 50 lakhs from central revenues, to which additions should be made from time to time as financial conditions permit. The Government of India have decided that for this lump grant should be substituted a lump grant of Rs. 25 lakhs to be paid in instalments supplemented by annual recurring grants of Rs. 7¼ lakhs, of which Rs. 5 lakhs would be devoted to the promotion of research and Rs. 2¼ lakhs to expenditure on establishment, etc. Provision for a lump grant of Rs. 15 lakhs and of a grant of Rs. 1·40 lakhs for the cost of establishment has since been made in the Budget of 1929-30.

It has been decided that the Council of Agricultural Research should not be brought into being as a statutory body, as recom-

mended by the Royal Commission, but should be registered under the Registration of Societies Act of 1860.

The remaining recommendations of the Royal Commission which primarily concern the Government of India, the most important of which are those regarding the expansion of the Pusa Research Institute as an educational institution, the reorganisation of the Imperial Institute of Veterinary Research, the provision of facilities in India for higher veterinary training, the organisation of a Central Agricultural Research Service, the formation of a Central Jute Committee on the lines of the Indian Central Cotton Committee, the future policy of the Government of India in regard to the development of cinchona cultivation, the manufacture of quinine, and the establishment of an Institute of Animal Nutrition were still under the consideration of the Government of India at the close of the year under review. Local Governments are dealing with those recommendations of the Royal Commission with which they are concerned.

* * *

Agricultural education forms an integral part of the activities of Agricultural Departments in India. The objective of the agricultural colleges is to equip students who pass out from them either for posts in Government service or for farming their own land or that of others. No distinction between these classes of students is, however, made in the courses which are provided, and the colleges are in the main regarded as avenues to employment in the agricultural departments. Of the six colleges now working at Poona, Coimbatore, Lyallpur, Nagpur, Cawnpore, and Mandalay, the first four are affiliated to universities. One hundred and forty trained students passed out from these institutions during the year under report after getting either a degree, a diploma or a certificate.

The Agricultural Research Institute at Pusa and the Imperial Institute of Animal Husbandry and Dairying at Bangalore provide facilities for post-graduate courses qualifying for the highest appointments in the agricultural service. During 1927-28, ten students completed their post-graduate training, five each at Pusa and Bangalore. At the close of the year the same number remained in residence at both institutions. Of the 31 students who appeared for the Dairy Diploma examination of the Bangalore Institute, 26 passed.

The scope and character of the agricultural education which should be given in secondary schools have been subjects of acute controversy in India. Divergences of opinion have led to the evolution of two entirely different types of school—the vocational school sponsored in Bombay and the " bias " school, in the adoption of which the Punjab led the way. The first type of school purports to fashion a youth of a cultivating or a land-holding class into a farmer in two years, while the Punjab type mainly aims at giving the boys a " bias " towards agriculture as a vocation. In the words of a circular issued by the Punjab Government in 1923: " The aim is to enrich the middle school course in rural areas by the inclusion of agricultural training, thus to bring it more in keeping with the environment of pupils; and the object is to use agriculture as a means of mental discipline and training and as an important accessory to the general subjects taught in these schools ". The vocational schools have not as yet appealed to the people for whom they are intended. Even in Bombay, which pioneered the experiment, two of the schools opened had to be closed. In Madras, the Central Provinces, and Bengal the results have been even more disappointing. On the other hand, the " bias " schools of the Punjab, where they number about 120, have been so successful that Bombay and the United Provinces have followed their lead by establishing similar schools. The Royal Commission on Agriculture have given it as their opinion that schools of the Punjab type are preferable to those of the Bombay types, and have recommended that no more schools of the latter type should be opened, and that all existing schools in their present form should be closed.

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The Agricultural Departments in India have, during the past 23 years, devoted particular attention to the provision of improved varieties of the principal staple crops of the country. Most of them have been obtained by the usual methods of selection from the mixtures previously grown. While the use of mixed seed consisting of different varieties which varied with respect to quality and yield had resulted both in low yields and lack of uniformity in the produce, the pure lines isolated permit larger crops of superior quality to be raised under the same treatment, and yield a higher economic return more especially when their use is accompanied by manuring and improved cultural methods. When difficulty in

raising suitable selected types has been experienced, either acclimatization or hybridization has been resorted to. The improvement effected was one which appealed to the cultivators, and it is estimated that there are now ten million acres on which improved varieties are cultivated. The area has almost doubled since 1923-24. As remarked by the Royal Commission on Agriculture in India, considerable as have been the achievements of the Agricultural Departments in introducing improved varieties of crops, there is still a vast field for further work in this direction.

Among all the crops grown, rice stands an easy first in importance. On an average it occupies 35 per cent. of the total cultivated area, and is the staple food of most of the people of the country. With nearly 19 million acres, or 71 per cent. of the total provincial cropped area, Bengal is the most important rice-growing province. In Indrasail and Dudshar the department has transplanted *amans* (winter rices), which are suited for the heavy and light soils, respectively, of Northern and Eastern Bengal. The broadcast *Aus* (autumn rice) group is represented by Mataktara, which yields heavy crops on fertile land, and by a very fine rice called Charnak, which is recommended for lighter soils. During 1927-28, these varieties were estimated to have been grown on an area of 133,000 acres. The superiority of Sabour Dahia when grown on poor soil remains unchallenged in Bihar and Orissa. Originally selected for South Bhagalpur, it has proved generally suitable for other parts of the province. It combines a heavy yield with earliness, and has established a good reputation as a table rice. The three selections representing medium early, medium late, and late rices made at Cuttack have become popular in parts of Orissa on account of their high yield. The eight types of rice distributed from Coimbatore and seven from Aduturai were grown in Madras last year over an area of 104,000 acres. Although Burma carried only 14 per cent. of the total acreage under rice, 50 per cent. of the rice she produced is available for export. She contributes in fact 86 per cent. of all the rice exported in India.

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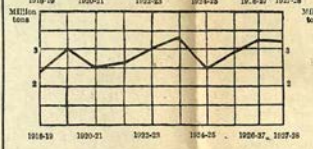
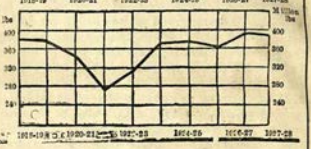
The Agricultural Department has succeeded in selecting ten types of uniform white grains. These types yield in the mill a higher percentage of whole quality rice than the local varieties commonly grown. The millers pay a premium of Rs. 5 to Rs. 20 per hundred baskets (4,600 lbs.) for these improved grains, and the cultivators

Yield of Certain Principal Crops from 1918-19 to 1927-28.

FOOD CROPS





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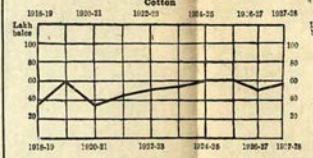
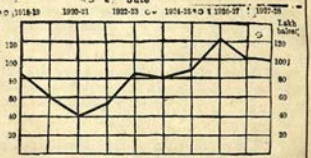
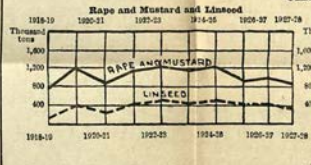
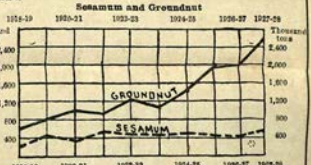


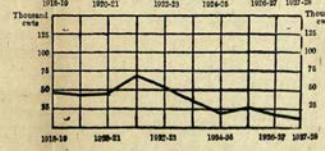


OILSEEDS





INDIGO (DYE)



are said to make an extra profit of Rs. 10 per acre by growing them. The area under these improved varieties has increased from 73,000 to 319,000 acres since 1921-22. Though this area is less than 3 per cent. of the total area under rice in Burma, the leaven is gradually working, and slowly but surely the standard of Burma rice is being raised.

In the Eastern and Southern Circles of the Central Provinces, selected strains of Luchai, Bhondu and Bhata Gurmatia, which are late, medium and early rices, respectively, maintain their popularity. They yield on an average about 450 lbs. more per acre than the local mixtures. Kolamba rice No. 42, selected at Karjat, in the Bombay Presidency, has spread over 40,000 acres in the North Konkan. Another Karjat selection known as Kolamba No. 79 has been found particularly suitable for high-lying areas in the Thana District.

The rice crop of Sind is being dealt with at Larkana, where improved types of Kangani and Sugdasi rices are now available for distribution. Ammophos, the new fertilizer containing 20 per cent. each of ammonia and phosphoric acid, has proved an extraordinarily effective manure for paddy in South and Lower Burma.

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The acreage under wheat in India is second only to that of rice. On an average it is 10 per cent. of the total area under cultivation. Since the inception of the Imperial Agricultural Research Institute at Pusa, the production of high yielding rust-resistant wheats with good grain quality and standing power has been kept in the forefront of its plant-breeding programme. Pusa 12, with its high yielding and tillering power, is one of the most popular wheats in the United Provinces. It is being grown, too, in the Simla Hills, the Eastern Punjab, Sind and some of the Rajputana States. Pusa 4, which is an early wheat of good standing power with a strong straw and a large translucent grain of fine appearance, has proved particularly suitable for Bundelkhand and the North West Frontier Province.

It is most gratifying to know that under the adverse climatic conditions prevailing during the year these Pusa wheats gave much larger yields than the *desi* varieties, and that the demand for Pusa wheat seed has increased very greatly in consequence. The demand from certain localities for a bearded wheat of high yielding powers

has been met by evolving Pusa 52. This wheat has given high yields in Bihar, where, in a year remarkable for the heavy incidence of rust as was that under review, it proved the most rust resistant of all the Pusa wheats. Pusa 111, a smooth-glumed variant of Pusa 4, and Pusa 11, a bearded variant of Federation, now under test, promises to prove " hard " wheats, superior in this respect to even Pusa 4.

There are over nine million acres under wheat in the British Punjab. Of this area 20 per cent. was sown with improved varieties. The variety, the spread of which is encouraged by the Department, is known as Punjab 8 A. First introduced in 1919, Punjab 8 A has now spread over twelve lakhs of acres. The other improved wheats under cultivation are Punjab 11, Pusa 4, Pusa 12 and Punjab 17. Pusa 12 and Pusa 4 have received wide recognition in the United Provinces, which is the second largest wheat-growing tract in India. They occupied the bulk of an area of 1,115,000 acres under improved wheats during the year. In those parts of the province where a bearded wheat is required, Pusa 52 and Pusa 54 are gradually replacing Muzaffernagar wheat, which is too prone to suffer from rust. The area under Pusa 4 in the North West Frontier Province is about 330,000 acres, or 33 per cent. of the total area under wheat in the province.

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The estimated area under sugar cane in India was 2,954,000 acres during the year under review, as against 2,924,000 acres last year, as finally estimated. The estimated production of raw sugar (*gur*) was 3,221,000 tons as compared with 3,255,000 tons last year, as finally estimated. After deducting exports of home-made sugar, re-exports of foreign sugars and stocks on 1st April, 1928, at the principal ports in India, it is estimated that about 886,334 tons of imported and locally manufactured white sugar were consumed in India during the official year 1927-28. This is exclusive of the raw sugar (*gur*) manufactured locally, the whole of which, except about 112,500 tons melted by the refineries and about 6,300 tons exported, was consumed in the country.

The Imperial Cane-Breeding Station at Coimbatore continued to breed new varieties of sugar cane. The new canes evolved at this station are now being grown successfully in Northern India on over a lakh of acres. The cane most popular in the United Provinces is Co. 290. Under the Java system of cultivation, with

a rainfall of 42 inches, supplemented by 25 inches of irrigation water, this cane gave during the year an average yield of 45 tons of cane and 4·4 tons of commercial sugar per acre. The bulk of the cane crushed in some of the sugar factories in North Bihar now consists of Co. varieties. Co. 213 has established its reputation in Bengal and is likely to replace both the local canes and Tanna. In Assam Co. 210 and Co. 213 have given very high yields, both as plant and ratoon crops. In the Punjab Co. 205 continues to gain favour on the rain-fed lands, while Co. 223 has given a good account of itself in irrigated areas.

The most important cane investigation in Bombay is directed towards the cheapening of the cost of growing the crop in the Deccan. J. 247 is rapidly becoming popular in Madras on account of its resistance to disease and drought; in some localities 85 per cent. of the cane grown is of this variety. The economics of the system of short-planting for seed have been carefully worked out at Anakpalle; it shows an increased profit over the local methods of over Rs. 118 per acre. The McGlashhan furnace, or Sindewahi furnace as it is sometime called, is becoming very popular in the cane-growing tracts of the Madras Presidency. It is reckoned that the saving in fuel consequent on the use of this furnace amounts to Rs. 50 to Rs. 100 per acre of cane dealt with.

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During the year under review, the area under cotton was 24,767,000 acres, as compared with 24,882,000 acres in 1926-27, as finally estimated. The yield per acre, expressed in terms of lint, rose from 81 to 95 lbs., and the total estimated yield of cotton in 1927-28 was 5,896,000 bales of 400 lbs., as against 5,024,000 bales for the previous season. There was a slight improvement in the demand for Indian cotton from Europe and China, but the strike in the Bombay mills was responsible for a reduction in local consumption of three lakhs of bales. The imports of American cotton amounted to 67,000 bales as against 325,000 bales during the previous season.

The Agricultural Department's work on this crop aims at improving the quality of the lint and at increasing the yield per acre. The improved strains introduced were sown during 1927-28 on over three million acres. In Madras the strain Co. 440 maintained its superiority over the other Cambodia strains. It gives a higher yield; it is more vigorous in growth and it is less susceptible

to the attacks of insect pests. Further spinning tests have confirmed the view that this cotton is capable of spinning 36·36s warp.

At Hagari, H. 62 has for the fourth year in succession proved itself superior to H. 25, both in yield and ginning outturn. Gadag No. 1, a selection made by the Bombay Department for the Kumpta tract, has already established a reputation. About 150 bales of Dhulia, which spins up to 20s warp, have been placed on the market this year. The Economic Botanist in the Central Provinces has succeeded in isolating an improved type known as *Neglectum Verem* No. 262. It gives a ginning outturn of 36, is wilt resistant, and spins up to 24s warp. The local mills have shown great interest in this cotton. The elimination of the *Khaki* lint in the Chanda "Jari" crop has also been successful, and seeds of a pure white strain have been distributed. The United Provinces Department's selection, Cawnpore 402, continues to maintain its superiority.

The application of the Cotton Transport Act to parts of the Bombay Presidency has led to an improvement in the quality of Surat, Kumpta and Dharwar cottons. The three zones of the Madras Presidency to which the Act has been applied are those in which "Northerns and Westerns", "Cambodia" and "Tinnevelly" cotton are grown. The Indian Central Cotton Committee continued to give considerable attention to the operation of the Cotton Ginning and Pressing Factories Act, the organization of primary cotton markets and the marketing of improved cottons.

The Director of the Committee's Technological Laboratory tested during the year 59 samples of cotton for various agricultural officers. The Institute of Plant Industry at Indore has tackled the problem of an early maturing cotton suitable for the Malwa plateau. The Indian Central Cotton Committee now finances 13 provincial research schemes, of which five deal with cotton breeding, three with cotton physiology, two with cotton diseases and three with cotton pests. The pink bollworm research scheme in the United Provinces has conclusively proved that the sowing of heat-treated seed at an expenditure of six annas per acre yields a profit of Rs. 30.

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Although Jute occupies only 1·3 per cent. of the total area under cultivation in British India, it contributes 26 per cent. of the export trade of the country. The record crop of the previous

year having resulted in a drop in the price of the raw product the area shrank by 12 per cent. in 1927. Nearly 85 per cent. of the area is in Bengal, and it is to the credit of the local Agricultural Department that it has isolated and brought into general cultivation high yielding, disease-resistant strains of the two main species cultivated, *viz.*, *Corchorus Capsularis* and *C. olltorius*. On an average these departmental selections yield 25 per cent. more fibre than the local varieties. During the year under report they occupied nearly a million acres, or over 33 per cent. of the total area under the crop in the province. The rapidity with which they are spreading will be evident from the fact that the area under these improved varieties has increased by over 200 per cent. in four years, and by almost 100 per cent. in one year. There is a growing demand for them in Bihar, and Assam, too, where they have proved the most profitable of the varieties tried. The cultivation of jute is making progress in the Ganjar tract of the United Provinces, where the agricultural conditions are similar to those which obtain over large areas in Bengal.

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On an area of over a million acres cropped with tobacco, India produces nearly 1,000 million lbs. of dry leaf. She produces about 20 per cent. of the total quantity of tobacco produced in the world, and about 90 per cent. of the total quantity grown in the British Empire. In spite of her pre-eminent position among tobacco-growing countries, India does not enjoy a proportionate share of the international trade in this commodity. The reason is that practically all the indigenous tobaccos of India yield a dark, coarse leaf which gives a strong and pungent smoke: for cigarettes they are not suitable. At Pusa, the production of a high grade cigarette tobacco is being attempted. The well-known American variety, Adcock, is being acclimatised. The conditions of cultivation suitable to its successful culture are being studied, and improved methods of curing and maturing the leaf are being tried. A considerable measure of success has been achieved in all these three directions. Samples of leaf produced in the past season were sent to experts in England for valuation. They gave it as their opinion that they were the best they had obtained from India so far. The high prices realised for the 1926-27 crop have given a great impetus to the cultivation of Virginian varieties (Adcock and White Burley) in the Guntur District of Madras, and the area under them is now estimated at 25,000 acres. The varieties of cigar tobacco

imported from Sumatra and Manilla, and grown at Rangpur, have shown that cheroot tobacco of a high quality can be produced in Bengal.

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Over 8 per cent. of the total cultivated area in India is on an average cropped with oil-seeds, *viz.*, linseed, rape, mustard, sesamum, castor seed and ground nut. The United Provinces and Bihar, between them, carry half the total acreage under linseed, but the types grown are inferior as regards size of seed and oil-content to those grown in Peninsular India. As both classes also differ in their root-systems, hybridization is being employed at Pusa to produce a large-seeded race with vegetative and root systems suited to the soils of the Gangetic alluvium. The fourth hybrid generation under study contains many plants which appear to possess the desired characters. Of the pure types selected from unit species, Type 124 has consistently maintained its superiority in oil-content over the earlier selections (Types 12 and 121) during the past three seasons. Ground nut has, in recent years, become a very popular crop in some provinces. The area of over five million acres sown in 1927-28 was over four times as large as that in 1918-19. The introduction of early varieties which do not require irrigation has raised ground nut to the position of being the most important *kharif* (autumn) oil-seed crop grown in the Bombay Presidency. Twenty years ago its cultivation was practically unknown in Upper Gujarat, Khandesh and Dharwar. The area in these three districts is now in the neighbourhood of four lakhs of acres. The crop has also invaded the cotton tracts of the Central Provinces. In Burma the area under it has increased from nothing to five lakhs of acres within the last 20 years. The Madras Department is demonstrating a method by which cocoanuts can be raised under a dry system of cultivation. Trees in several of the plots planted in 1924 have already begun to flower. This is a great advance over the local system under which trees are not expected to begin to bear till they are ten years old or more. As a result of these demonstrations, lands hitherto lying waste are being planted.

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In the past the Indian cultivator relied very largely on Nature to provide food for his cattle in the form of pasture. In course of time most of these pasture lands had to be ploughed up to provide

bread for the ever-increasing human population, and the supply of food available for cattle was thus reduced very greatly. The cattle over a large part of India have now to subsist on fodder composed of stalks and leaves of over-ripe grain crops, supplemented by a certain amount of stubble-grazing. A diet of such small nutritive value, which moreover is hardly sufficient in quantity for even half the year, is one of the principal contributory causes towards the deterioration of the bovine population of India, and the work done for their improvement will not bear full fruit until and unless the Indian cultivator is taught to make better provision for feeding them. If cattle-owners could be induced to grow fodder crops and to store fodder in the green state in silo pits or in stacks or barns after drying, as is done on Government farms, they would be secured to some extent against fodder famines which are one of the great barriers to steady progress, not only in cattle-breeding but in agriculture generally in this country. The most valuable leguminous fodder crop introduced by the Agricultural Department is Egyptian clover or *berseem*. It is now being grown successfully in Bihar, Sind, the Central Provinces, the Punjab and the North-West Frontier Province. At Pusa a large area of irrigated land, which was previously lying waste, is laid down to *berseem* every year, after which a second crop of early maize is raised. Since it was first introduced on the Tarrnab farm in 1911, *berseem* has replaced Persian clover on 12,000 acres in the North-West Frontier Province, where the practice is to grow clover in every irrigated field once in three years. Among the new fodders introduced in Bihar and Orissa, Rata grass (*Anthistiria eiliata*) and soya beans are the most promising. Perennial fodders like Elephant grass and Guinea grass are being popularised in parts of Assam. Much attention is now being given on Government farms in India to the making of silage. Green fodders are stored in pit silos towards the end of the rains and fed to cattle in the dry weather, when grazing areas are parched and bare. This method of conserving fodder in the green state is being demonstrated in the villages.

A considerable improvement, both in the yield and quality of grass, has resulted in two fairly large forest areas placed under rotational grazing in the Bombay Presidency. In an experimental area on the sea coast, the yield of grass increased phenomenally when the first growth was turned into silage and the second growth was cut or grazed or both.

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In addition to the economic work on crops a considerable amount of research work bearing on fundamental problems of agricultural chemistry, agricultural bacteriology, plant pathology, mycology and entomology is being done by the various departments of agriculture in India. Among the investigations in progress during the year may be mentioned those dealing with the lime requirements of soils, the reclamation of saline lands, the possibility of producing artificial farmyard manure, the detection of adulterants in ghee (clarified butter), the mosaic disease of sugarcane, and the control of pests infecting cereals in storage.

When investigating the cause of acidity in laterite soils, the Agricultural Chemist at Pusa observed that a rod of pure antimony dipped into moist soil develops an electric potential proportional to the hydrogen ion value, and that it is eminently suited for use in determining the lime requirements of soils. Based on this observation, a portable apparatus has been designed for employment in the field.

The possibility of reclaiming about 300,000 acres of *bara* (saline) lands in the Montgomery District of the Punjab is under investigation at a special station at Harappa Road. The keeping of such lands continuously under water for a period of two or more months has produced promising results. The possibilities of producing artificial farmyard manure on a large scale by compositing the waste products of a farm are under investigation at various centres. Success has been achieved in converting such materials as sorghum stubble, sugarcane trash, gram stalks, prickly pear, plantain stems, weeds, etc., into manure of excellent composition.

In field trials carried out simultaneously at Pusa, Netarhat (Chota Nagpur) and Aligarh (United Provinces), a compost of bone meal, sulphur, sand and charcoal gave higher yields of potatoes than either bone meal or superphosphate. Its superiority was equally marked in plots carrying crops of wheat and onions.

The acetic ether test evolved at Pusa for the detection of the adulteration of butter and *ghee* by animal fat has proved to be effective as a test for cow butters and for buffalo butters made from the milk of animals not fed on cotton seed. In the case of butter made from the milk of buffaloes fed on cotton seed, Halphen's test should be applied, and if a positive result is obtained a slight modification of the proportion of acetic ether and alcohol permits of a reliable deduction being made. The test, however, does not

seem to apply when the object is to detect adulteration with "vegetable" fat.

Another year's work on the storage of wheat under mercury vapour has definitely proved that the method is quite satisfactory for household purposes. Mercury, while effectively protecting wheat against the ravages of *Sitophilus orysae*, does not adversely affect either its germinating capacity or its food value.

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The Royal Commission on Agriculture have pointed out that British India has 61 cattle and buffaloes per 100 of human population and 67 for every 100 acres of cultivated area. We have thus twice as many cattle per cent. of population as other thickly-populated countries such as Great Britain, Germany and Japan, and almost three times as many per 100 of population as Egypt, where the general conditions under which agriculture is carried on are almost similar to those which obtain in India. Even with such obvious overstocking, the draught power available for tillage operations is inadequate, and there is a general shortage of milk and milk products. Such a position the Royal Commission on Agriculture in India ascribe to what they call a vicious circle. They proceed to describe it in the following words: "The number of cattle within a district depends upon, and is regulated by, the demand for bullocks. The worse the conditions for rearing efficient cattle, the greater the number kept tends to be. Cows become less fertile and their calves become undersized and do not satisfy cultivators who, in the attempt to secure useful bullocks, breed more and more cattle. As numbers increase or as the increase of tillage encroaches on the better grazing land, the pressure on the available supply of food leads to still further poorness in the cows. As cattle grow smaller in size and greater in number, the rate at which conditions become worse for the breeding of good livestock is accelerated. For it must not be supposed that the food required by a hundred small cattle is the same as that needed by fifty of double the size. As cattle become smaller, the amount of food needed in proportion to their size increases. Thus large numbers of diminutive cattle are a serious drain on a country in which the fodder supply is so scarce at certain seasons of the year as it is in India. The process having gone so far, India having acquired so large a cattle population and the size of the animals in many tracts having fallen so low, the task of reversing the process of deteriora-

tion and of improving the livestock of this country is now a gigantic one; but on an improvement in its cattle depends to a degree that is little understood the prosperity of its agriculture and the task must be faced."

Though the cattle problem in India is admittedly a formidable one, it is believed that improvement can be effected by selective breeding, cross-breeding and better feeding. The different breeds are, therefore, being studied, and pure bred herds established with a view to providing a foundation whereon the edifice of improved cattle-breeding and dairying can, in course of time, be raised. Given this foundation it is possible to raise breeds of cattle which will give good draught bullocks and profitable milch cows. Much attention is also being paid to the question both of growing and storing fodders. Luscious fodders unknown in India previously have been introduced in the rotation, methods of storing fodders in silos and in the dry state have been devised, and accurate information regarding the digestibility and nutritive values of different foodstuffs and fodders is being collected. With the object of demonstrating the possibilities of transporting milk from rural areas where it is relatively cheap to urban centres where it is dear, schemes have been promoted for supplying milk to the towns of Calcutta, Nagpur, Muzafferpore, Agra, Hathras, Naini Tal, Jhansi, and Lucknow. Persons capable of taking charge of such schemes are being trained at the Imperial Institute of Animal Husbandry and Dairying at Bangalore, and expert advice in technical matters connected with cattle-breeding and dairying has been made available to the provincial departments of agriculture, city municipal corporations and private individuals.

With a view to stimulating and to some extent co-ordinating the efforts being made in the various provinces and Indian States towards cattle improvement, the Government of India have established at Bangalore, a Central Bureau for Animal Husbandry and Dairying, with the Imperial Dairy Expert as Secretary. The first task to which the Bureau has applied itself is that of encouraging the formation of herds of pure bred cattle by private owners.

Cattle-breeding operations at Pusa are being directed along two lines: (1) a herd of Sahiwals or Montgomeries is being graded up by selective breeding, and (2) the poorer milkers of the same breed are being crossed with Ayrshire bulls of high milking pedigree with the primary object of obtaining reliable information regarding the inheritance of observable characters in the crosses. In the

pure Sahiwal herd, six cows gave during the year under report over 4,800 lbs. of milk each, in a lactation period of 304 days. Among the half-bred progeny of rejected Sahiwal cows sired by Ayrshire or Holstein bulls, the yields of eight cows were over 7,600 lbs. In the Montgomery herd the average yield per cow per day was 12·7 lb., while in the cross-bred herd, it was 21·0 lb. The average percentage of cows in milk was 51 for the Montgomery herd and 68 for the cross-bred herd. The cross-breds give much more milk than the pure bred Montgomery cows and a greater number of calves over a period of years. It must, however, be remembered that half-bred animals are less hardy and disease-resistant than those of pure indigenous breeds, and that these disadvantages tend to become more accentuated by the further introduction of foreign blood. Having produced a cross of good milking capacity by cross-breeding, attempts are now being made to adopt the cross to local conditions by mating half-bred dams with Sahiwal bulls of good milch pedigree. The ¼-Ayrshires thus produced are promising: one of them gave during the year under review over 4,800 lbs. of milk in a lactation period of 304 days.

In accordance with the breeding policy adopted at Pusa, most of the cross-bred cows on the Bangalore and Wellington farms are now sired by Indian bulls of good milch pedigree. At Karnal, pure herds of Thar-Parkar and Hariana cattle and of Burra buffaloes; and at Wellington and Bangalore herds of Scindi cows are being built up. Six cows each of the Hariana and Thar-Parkar breeds gave yields of over 3,500 lbs. of milk at Karnal during the year under review. The creamery at Anand is being run as a butter factory. It is being utilised, too, for experimental work in connection with the transport of fresh milk to Bombay and the manufacture of *ghee*, condensed milk and casein.

In feeding experiments on the nutrition of growing animals at Bangalore, spear grass silage combined with a low allowance of concentrated food induced a higher increase in weight than spear grass hay or *ragi* (*Eleusine coracana*) straw combined with even a high allowance of concentrate. In experiments designed to determine the relation between the digestive capacity and milk yield of different breeds of milch cows, cross-bred cows consumed 50 per cent. more food than Scindi cows. Scindi cows on going dry consumed less food: this was not noticeable in the case of cross-breds. When the concentrate was reduced, the latter kept up their food consumption by eating more roughage.

With a view to permitting the landing of horses, asses, mules, kine, bulls, bullocks, buffaloes, goats and other ruminating animals and of swine at the port of Karachi, the Government of India issued, on the 5th January, 1928, the necessary notifications under section 3 of the Live Stock Importation Act, 1898 (IX of 1898).

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With the abatement of the ravages of rinderpest among animals in the eastern provinces, the total reported mortality from contagious diseases dropped from 322,331 in 1926-27 to 311,222 in 1927-28. Rinderpest alone accounted for almost 60 per cent. of the deaths. The provinces which suffered most were Burma, Madras and the United Provinces, each of which lost through rinderpest over 30,000 bovines, while the Punjab recorded more than 20,000 deaths from this fell disease. The number of preventive inoculations performed rose from 1,527,213 to 1,727,055. The gradual rise in the number of cattle voluntarily offered for protection indicates that the value of western prophylactic methods is being more and more appreciated by cattle-owners in this country.

The number of hospitals and dispensaries maintained for the treatment of disease among cattle rose from 786 to 831, and the cases treated therein from 1,904,478 to 2,106,107. In addition, 1,320,729 cases were treated by itinerant veterinary officers, as against 1,226,256 in the previous year. The total number of cases treated was 3,426,836 as compared with 3,130,734 in 1926-27.

In addition to the measures adopted for saving cattle from the ravages of disease, the Veterinary Department performs the important function of emasculating inferior and undesirable bulls. During 1927-28, no less than 408,396 scrub bulls were castrated in British India, of which as many as 272,185 were dealt with in the Punjab. The introduction of the Burdizzo castrator, by which an animal can be rendered sterile without cutting the skin or shedding blood, has rendered the operation unobjectionable to the religious susceptibilities of the people, and it is to be hoped that this will, in course of time, result in an appreciable increase in the number of animals offered for castration, particularly in provinces where old prejudices are hard to uproot.

A natural periodic decline in the prevalence and intensity of outbreaks of rinderpest in some parts of India reduced the demand for the products of the Imperial Institute of Veterinary Research

at Muktesar from 6,318,758 doses in 1926-27 to 6,133,509 in 1927-28. The decrease in the demand for anti-rinderpest serum was to some extent counter-balanced by the increase in the demand for other prophylactics such as hæmorrhagic septicæmia and black quarter. This satisfactory position has been attained mainly by developing the resources of the sub-station at Izatnagar, where the whole of the required anti-rinderpest and anti-hæmorrhagic septicæmia sera is now manufactured.

For the training of students in veterinary science there are colleges at Bombay, Madras, Calcutta and Lahore, and schools at Insein and Taunggyi in Burma. A veterinary college is being constructed at Patna for Bihar and Orissa; it will begin to admit students in July, 1929. This college will have a cattle breeding and dairy farm attached to it, in which students will be given practical instruction in animal husbandry and dairying. The number of students who passed the diploma examinations of the college was 75, as against 59 in the previous year and 50 in 1925-26. The specialised short courses provided at the Imperial Institute of Veterinary Research, Muktesar, were taken by 18 officers and subordinates of the Civil and Military Veterinary Departments.

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The progress of agriculture and the welfare of the agricultural population of India depends a great deal upon the Forest Department. In India the Forest Departments are organised on a provincial basis in the same way as the Agricultural Departments now are. As in the case of education and research in Agriculture, the Central Government shoulders the burden of expenditure on research into forestry problems and certain forms of technical education.

The great forests of India are located for the most part in the hills, but there are forests and woods in the plains interspersed with cultivation. More than 20 per cent. of the surface of British India is land classified as forest and administered by the Forest Department. In spite of this, however, such a large proportion of the forests is situated in high and inaccessible hill localities that it is generally true to say that the most of them are inaccessible to cultivators, the majority of whom derive no direct benefits from the forests proper. Nevertheless, there is cultivation on the fringes to be found within their limits amounting in the aggregate

to a considerable area. More than 30 years ago the forests of India were officially divided into the following four classes:—forests which are important for climatic or physical reasons; forests from which the main supplies of valuable or useful timbers are derived; forests which yield the minor timber or other products or small supplies of the more valuable timbers; and lastly, forests which are really grazing grounds. This classification shows how largely the forests of a country can influence its general welfare, for they are more than a mere factor in its economy. They are part of its very make-up, influencing its climate and other natural conditions, not, perhaps, so powerfully as its hills and mountains, but still appreciably, and capable of proving an immensely valuable asset in its commerce, its agriculture, and its animal husbandry. Here, however, we are concerned only to show how the work of the Indian Forest Department concerns the general welfare of the people of India, and more particularly of the agricultural population of this country.

The great mass of the agricultural population derive no direct benefit from the forests proper, but the indirect benefits are immense, and in considering them we can start with the very foundations of agriculture—with climate, rainfall and the preservation of cultivable soil. Forests hold together the fertile surface soil: they store water and dole it out gradually, thus preventing disastrous floods and the formation of ravines; by checking erosion they prevent good soil from being washed into the rivers, and carried away to waste. They also directly increase the fertility of the land, being capable of forming rich vegetable mould even from mineral soils. Finally, in India, forests are a valuable asset in times of scarcity or famine, for they yield vast quantities of fodder and provide edible fruits and roots, of which the poor readily avail themselves. Advantage of the visit of the Royal Agricultural Commission has been taken by forest officers to lay stress on the immense benefits that forestry can bestow on the cultivator by providing him with wood fuel so that cow-dung may be used as manure. Like nearly every other division of the earth's surface, India was once far more densely wooded than she is at present. It seems probable that for centuries before the British Government in India took cognisance of India's forest problem, the process of deforestation went on steadily. The historic forests of the Gangetic plain have been sadly depleted, and although in some places the disappearance of the forests made for the spread of cultivation, in

other places the once wooded slopes and plains are now barren and desolate. As the traveller goes about India he will encounter many examples of the resentment of nature at the thoughtless or ignorant despoiling of her beneficial provision of forest trees and lesser growths of undergrowth and grass. He will see ravines and barren lands pouring down sand steadily to encroach on good silt. Dim traces in now sterile hills of dimunitive irrigation channels and tunnels mark the spots where springs and streams, long since dried up, enabled a vanished population to reap a harvest from ground which brings forth in these days nothing better than cactus or dwarf palm. Where there is good soil it cannot yield its full return to the cultivator since the manure which ought to go into it has to be burnt in place of the wood fuel now unobtainable. Fortunately, the forests of the high hills in which India's mighty rivers rise were always too vast and remote for them to suffer from human inroads. Had they been deforested in days gone by, it is certain that many of the great irrigation schemes of India, which depend for their existence on the perennial water supply of the great rivers, would not have come into being, and the almost incalculable benefits which they have conferred upon the country would have been lost. For the past two generations it has been the duty of the Indian Forest Department to act as nature's steward, to reclaim for her as much as possible of her lost possessions, and to protect her from the ravages which folly or ignorance would still inflict upon her. Naturally enough their work sometimes brings the officers of the Department into conflict with those who are affected by their operations. Restrictions upon the grazing of cattle, the felling of trees, and the lighting of fires, all of which are so necessary for the conservation of India's forest wealth, are frequently resented by those classes of the population whose activities are thereby restrained, and from time to time agitations, more or less serious, are set on foot against the Department. But on the other hand, the more sagacious of those who are affected by the working of the Forest Department realise that they must forego intermediate and temporary advantages if they are to receive the permanent benefits which the work of the Forest Department can bestow, and public opinion is in some places being enlisted in support of the Department. In Madras, for example, considerable tracts of forests covering, in the aggregate, about 3,200 square miles have been handed over to the management of village panchayats or committees of leading men, who, it is believed, have understood

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their responsibilities. A special officer attached to the provincial Board of Revenue scrutinizes the work of the panchayats. The Board decides how many cattle should be allowed to graze in any particular panchayat area, and also settles the rent for that area, but everything else is left to the panchayats themselves. At present it is not possible to say whether this system is likely to be extended to other provinces, but an officer belonging to the Forest Department of the United Provinces has recently been put on special duty to study the working of the Madras scheme.

It will hardly be denied by any one who studies the conditions that the provincial forest departments have done their best to hold the balance even between the rights and conveniences of the agriculturists and the latter's and the country's permanent interests. Even if we exclude Burma, no fewer than 12½ million animals graze in Government forests at nominal fees varying from 2 annas to Rs. 2 per annum, and of these animals, 4½ millions get free grazing. Moreover, it is estimated that the total value of rights and concessions enjoyed by villagers every year from the administered forests amounts to more than half a million sterling. Rights so extensive, unless carefully controlled and scientifically regulated, are capable of inflicting severe damage upon the forest resources of the country, and Mr. A. Rodger, the Inspector General of Forests and President of the Forest Research Institute at Dehra Dun, has spoken of the "terrible damage caused in India by excessive grazing". A few figures will show how extensive are the rights of grazing enjoyed by villagers in Government forests. All unclassed forests, or those areas which have not been reserved or protected and are for the most part situated in inaccessible and undeveloped tracts, are open to grazing, whilst of 85,264 square miles of reserved and protected forest, excluding Burma, 44,327 square miles are open to grazing. More than a quarter of all the cattle of the Central Provinces and Berar graze in Government forests, and the percentage of the cattle of the Punjab and Bombay which graze in the Government forests of those two provinces is also appreciable. It is commonly assumed by opponents of the Forest Department that an almost limitless extension of grazing in Government forests is possible. The figures already quoted show that this is not true. In fact, it has been authoritatively estimated that the useful grazing land enclosed in forests, where neither grazing nor grass-cutting is at present allowed, is probably less than 5 per cent. of the total area available as grazing land in British India. The Forests Depart-

ment now manages to return an appreciable net profit to the Government of India every year. In 1926-27 this profit was 2 crores and 64 lakhs, a very gratifying result when it is remembered that in neither the United States nor Canada are the State forests paying concerns. There is no reason to doubt that the Indian forests will become increasingly profitable to the Indian Government as improvements in methods of transportation, in silvicultural research, and other technical matters are effected, and as the work now being carried on in the Forest Research Institute at Dehra Dun is enlarged. The area of the forests in connection with which the Research Institute works is 160,000,000 acres, indeed more, because Indian States have also large forests in addition to the above area. This is about one quarter of the area of British India, and the gross revenue realised from the forests in the year 1926-27 was Rs. 6·19 crores. In the year 1912-13 the gross revenue was Rs. 3·22 crores. This all but doubling of the gross revenue in 13 years may fairly be ascribed in part to the work done in forest research in India since 1906. This research is principally economic, but a great deal of work had also been done by the silvicultural and chemical branches of the Research Institute, and the results of this have already been apparent. In the botanical and entomological branches it is naturally more difficult to make visible and measurable progress within a short period of years.

Mr. A. Rodger, O.B.E., held the post of Inspector General of Forests and President, Forest Research Institute and College, throughout the year under review. Two Indian probationers for the Indian Forest Service completed their training at the Forest College, Dehra Dun, in November, 1928, but one failed to qualify in the final examination and was not appointed to the service. The second candidate joined the Department and was posted to Madras. The Government of India also appointed a Muhammadan candidate who had completed his training in the United Kingdom and had undergone a short course at the Forest College at Dehra Dun. Three Indians and one Anglo-Indian, who were successful at the Indian Forest Service competitive examination in August, were selected as probationers and joined the Forest College for training at the end of the year. The concession granted last year to certain Indian students who were undergoing, or had undergone, at their own expense, a course of Forestry in the United Kingdom and had, owing to changes in the regulations governing recruitment to this service, no chance of appearing as candidates at the examination in

1928, is to be extended in 1929 to students who went to England before 1926 and who by taking their final examination in the summer of 1928 were prevented from competing in India in that year.

During the year the draft rules to be made under section 96B (2) of the Government of India Act, to govern recruitment to the Indian Forest Service, were sanctioned by the Secretary of State.

Proposals for the reorganisation of the Indian Forest Service cadre in Assam were sanctioned by the Secretary of State during the year. The scheme involved an increase in the strength of the Indian Forest Service in the Province from 14 to 17, including the revival of a second post of Conservator.

The rules for the entry into the Forest Department as Rangers of Indian non-commissioned officers of His Majesty's Indian Army and Indian State services were revised and circulated.

The institution of a special course of training for Indian Forest Service and Provincial Forest Service officers at the Forest Research Institute and College, Dehra Dun, was sanctioned during the year. The course will be open to all forest officers who may be deputed by local Governments and will not last more than six months, *i.e.*, from July to the end of December each year. No syllabus has been prescribed, the wishes of local Governments for the training of their officers in one or more subjects being followed as far as possible. A fee of Rs. 100 per mensem will be levied, and no diploma will be granted.

India was represented by 8 delegates at the Empire Forestry Conference which was held in Australia and New Zealand in the autumn of 1928. The delegation was led by Sir Peter Clutterbuck, Timber Adviser to the High Commissioner for India and recently Inspector General of Forests. Much progress was made in the advancement and co-ordination of the practice of the science of forestry in the British Empire.

All branches of the Forest Research Institute continued to expand their several spheres of work. The Entomologist devised practical remedies for the defoliators of Sissoo in irrigated plantations, and also carried out extensive statistical and biological studies of teak and other defoliators, and the tropical species of pinhole borers. Important advances were also made in the Forest Economist's branch. The investigations regarding the utilisation of bamboos for pulp were brought to a successful conclusion, and have resulted in commercial activities in this connection both in England and India. Efforts to forward the use of Indian hard-

woods in railway carriage building and other timber-using industries have also borne fruit, and the consumption of hardwoods other than teak increased considerably. The importance of data obtained from the work done in the Timber-testing Section has been increasingly appreciated by commercial firms, Government factories, etc. Improvements have also been evolved in the preservative treatment specifications for sleepers, which have resulted in a daily saving of several hundreds of rupees in one Railway's treating plant alone. Progress has also been evident in research on both kiln-seasoning and minor forest products, much of the work done in the latter section being supplemented by important investigations of a highly technical character undertaken by the Bio-Chemist.

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The record of the work performed by the Survey of India during the year under review is very creditable. It has carried out much work for other Government departments and private parties, in addition to its topographical and geodetic programme.

Lt.-Colonels R. H. Thomas, D.S.C., R.E., and C. M. Browne, C.M.G., D.S.C., R.E., represented the Survey of India at the Empire Surveyors' Conference, which was held in London and Southampton in July, 1928. They also attended the International Geographical Congress held at Cambridge in the same month. Captain G. Bomford, R.E., attended the International Conference on Wireless Longitudes at Leyden.

During the Survey year 1927-28 an area of approximately 48,000 square miles was surveyed, mostly on the scales of one inch and half inch to one mile. The Bhutanese Durbar lent one surveyor and permitted officers of the Survey of India to cross the frontier for the first time. This resulted in 476 square miles of incidental survey of previously unexplored country, and in triangulation which will improve traverse adjustments in the adjoining Bengal Duars.

In addition to a normal programme of forest, riverain and Cantonment surveys and those in connection with the Sutlej Valley Irrigation and the Sind Lloyd Barrage projects, the following special surveys were carried out at the request of local Governments, other departments or private parties:—

North-West Frontier Province.—Cadastral and boundary surveys in Peshawar and Dera Ismail Khan districts.

Baluchistan.—One-inch surveys in the Kalat State and in the Bolan Pass and Sibi districts.

Punjab and Delhi.—Bazar survey at Paharganj, New Delhi.

Boundary surveys in Gurgaon district.

Kangra Valley development survey in Kangra district.

Rajputana Agency and Ajmer.—Four-inch survey of the Kailana Tank Catchment area in the Jodhpur State.

A special 16-inch survey of the Mayo College grounds in Ajmer.

United Provinces.—Boundary surveys in Bulandshahr district.

Hyderabad.—Special 3-inch survey of part of Hyderabad City and environs.

Mysore.—Large-scale surveys of private estates in the Kadur and Hassan district.

Madras Presidency and Madras States.—Large-scale surveys of private tea, coffee and rubber estates in the Coimbatore, Malabar and Nilgiri districts and in Cochin State; 4-inch survey of mining concession areas in Sandur State.

Bengal Presidency.—Air survey in Malda district for settlement surveys by the Air Survey Co., Ltd., with the aid of Survey of India officers.

Assam.—Tea-garden surveys in Sylhet district.

Burma.—Large-scale survey of a rubber estate.

The scientific operations of the department during the year included the following:—

(*i*) Longitude observations, Dehra Dun. The results of longitude operations undertaken during October and November, 1926, were scrutinized in the light of data received from the other Observatories participating in the project. These confirm the value provisionally obtained and make the longitude of Dehra Dun 0·02 seconds of time east of that obtained in 1894-96. The reception of the daily wireless time signals from Bordeaux and Rugby is being continued in order to see if there is any variation in longitude.

(*ii*) Magnetic and Meteorological observations at Dehra Dun Observatory. During the year 1927-28 the

Magnetographs recorded 3 magnetic storms of great intensity: The Omori Seismograph recorded 35 earthquakes, of which three were of considerable and one of great intensity.

(*iii*) The inspection of the Tidal Observatories at Bassein, Rangoon, Elephant Point and Basra, and the preparation and publication of the Tide Tables for Basra and Indian ports for 1929. The predictions for the Tide Tables for 1930 were carried out with the Tide Predicting Machine.

(*iv*) Gravity and deflection observations. In Sind and Baluchistan the force of gravity, as well as plumb-line deflections in the meridian and prime vertical, were observed at 13 stations—3 stations near the coast in Las Bela State, 4 stations in the Indus Delta, 1 station at Hyderabad and 5 stations in Chagai district of Baluchistan. Gravity observations alone were made at 3 stations in Chagai district. Except for one considerable northerly deflection near the Rann of Cutch no exceptional results were obtained.

(*v*) Secondary triangulation in the North-West Frontier Province. The work consisted of two short extensions; the first from the Great Indus principal series, about Campbellpore, to the neighbourhood of Peshawar, a total length of 60 miles; and the second running from the North Baluchistan Series, north-west of Bannu, up the Kurram Valley as far as Parachinar, and in the opposite direction to Razmak, a total length of 90 miles. A small Wild universal theodolite was used by the observer with very satisfactory results.

(*vi*) Levelling operations. A total of 1,431 miles of high precision levelling was done. This includes branch lines not reckoned in the net mileage. Secondary levelling of 1,085 miles for the Lloyd Barrage Project of the Bombay Government and of 14 miles for the Baveli Irrigation Project of the Punjab Government was also carried out during the year. Some tertiary levelling was also done for the latter project.

(*vii*) Scientific Computations. The most notable contribution to geodesy during the year was the interesting address

on the Figure of the Earth, delivered by Dr. J. deGraaff Hunter as President of the Mathematics and Physics Section of the 15th Indian Science Congress, held at Calcutta in January, 1928.

Numerous calculations dealing with the investigation into the most suitable Figure of the Earth were undertaken. Computations for the assessment of accuracy of triangulated heights, for the determination of plumb-line deflections in terms of International Spheroid, and for the adjustment of the 'Iraq and Turco-Persian boundary triangulations were also carried out.

During the year ending 30th September, 1928, 651 departmental maps, including reprints and new editions, have been published. These are made up as follows:—

Topographical Maps on 1-inch, ½-inch and ¼-inch scales.—211 new publications and 255 reprints and new editions.

Geographical Maps.—7 new publications and 50 reprints and new editions.

Special Maps.—83 new publications and 45 reprints and new editions.

In addition to these departmental maps, numerous maps and plans have been prepared for the Army, local Governments, Railways and other departments.

The system of map referencing now in use by the Army has entailed the drawing of 142 mesh originals during the year. These have been surprinted chiefly on new sheets, but many thousands of stock copies of maps have also had the mesh surprinted for supply to the Army.

The value of the instruments supplied to Public Offices is nearly the same as in the previous year, but the value of work done in the Workshop shows an increase by about 2½ per cent. Obsolescent and condemned stores to the value of about Rs. 1,800 have been disposed of to the best advantage of Government. Stock-taking of the serviceable, repairable and material stores was carried out as usual.

Repairs of optical instruments for the Army have been satisfactory, and the approximate quantity of outturn is given below:—2,700 Binoculars, 230 Telescopes, 200 Sight dials, 270 Range-finders, 80 Directors, 650 Watches. Besides ordinary manufactures and

repairs, 85 Microscopes were repaired for the Medical Department, and some of the special manufactures undertaken in the Mathematical Instrument Office are given below:—

1 Co-ordinatograph, Glass protractors, Radical Line Rulers, Instrument for Measuring Angle and Side of Angle.	For Air Survey.

Among the experiments carried out during the year was that with a Roller pen, which led to a satisfactory design being made for Air Survey.

It is also interesting to note that the Himalayan Club was founded on 17th February, 1928, at New Delhi with the object of encouraging and assisting Himalayan travel and exploration, and extending knowledge of the Himalayas through science, art, literature and sport. The initiation of this Club was due to the Hon'ble Sir Geoffrey Corbett, Secretary, Commerce Department of the Government of India, and to Major Kenneth Mason, M.C., R.E., Assistant Surveyor-General.

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Let us now turn to the consideration of irrigation, one of the most important factors in Indian agriculture. The most unsatisfactory feature of the Indian rainfall is its liability to failure or serious deficiency. The average rainfall over the whole country is about 45 inches, and there is but little variation on this average from year to year, the greatest recorded being only about 7 inches. Yet when separate tracts are considered extraordinary variations are found. At many stations annual rainfalls of less than half the average are not uncommon, while at some, less than a quarter of the normal amount has been recorded in a year of extreme drought. The effect of these variations, as productive of famine and scarcity, differs considerably according to the average rainfall of the tract, being least in those parts where the average is either very high or very low. In general it has been found that the lower the rainfall in the tract, the greater is its liability to serious deficiency from the average, and the more precarious is that in which the normal rainfall is below 50 inches. This average includes almost the whole of the Punjab and the North-West Frontier Province, the United Provinces, except the sub-montane districts, Sind, a large portion of Bihar, most of Madras, most of the Bombay Presidency, except

the strip along the coast, portions of the Central Provinces and a small tract in Burma. In all these areas the harvest depends on some form or other of irrigation. Ancient systems of irrigation such as wells, storage reservoirs, dams across the beds of streams, and irrigation canals have long been familiar to Indian engineers and agriculturists. The varied physical conditions of India, however, make it necessary to adopt more than one system of irrigation. In Sind and many parts of the Punjab, irrigation is essential to produce crops, while in parts of the Deccan some form of irrigation is only required as an insurance against years of scanty rainfall. In other parts of India there are localities where canal irrigation is only necessary as a precaution against famine. For the past quarter of a century irrigation has been carried on in British India along the lines laid down by the Irrigation Commission, appointed by Lord Curzon in 1901. But it was not until 1908 that irrigation statistics began to be systematically recorded. From that year until the year 1925-26 the remarkable progress in irrigation can be traced on the graph facing this page.

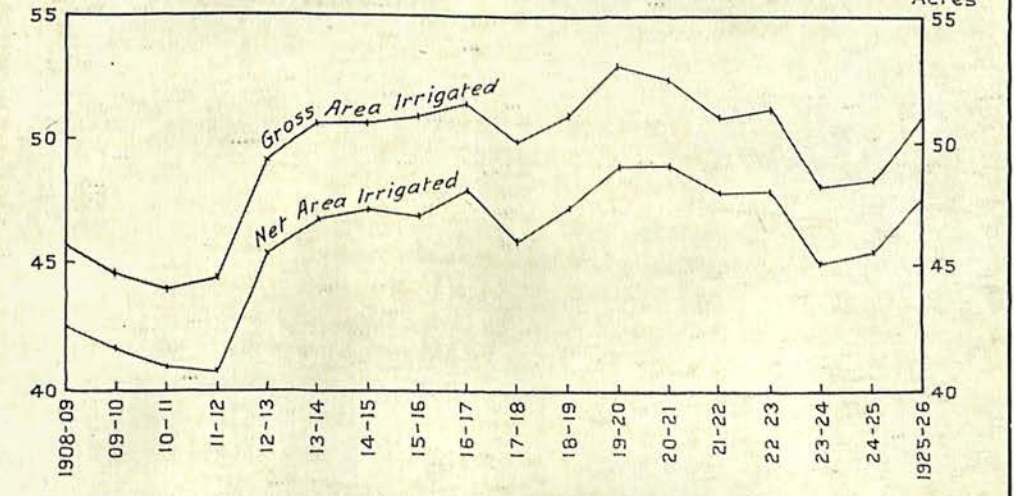
The vitally important part played by irrigation in the agriculture of the various provinces in India can be judged from a glance at the following figures, which are the averages of the five years 1921-22 to 1925-26. During this period an average of 11·8 per cent. of the annual cropped area of this country was irrigated by Government irrigation works. The collective value of the crops raised on the area so irrigated amounted to one-and-a-half times the total capital expenditure on the works.

Province.	Gross area sown.	Gross area of crops irrigated from Government and private sources.	Percentage of area irrigated to area sown.
	Acres (in 000's)	Acres (in 000's)	
Assam	6,379	364	5·7
Bengal	27,777	1,710	6·2
Bihar and Orissa	31,021	5,386	17·4
Bombay Proper	27,764	1,092	3·9
Bombay Sind	4,451	3,281	73·7
Burma	17,172	1,496	8·4
Central Provinces and Berar	26,726	1,110	4·2
Madras	37,691	11,208	29·7
North-West Frontier Province	2,673	919	34·4
Punjab	30,970	13,644	44·1
United Provinces	43,739	9,630	22·0
Minor Administrations	807	156	19·3
TOTAL	257,170	49,936	19·4

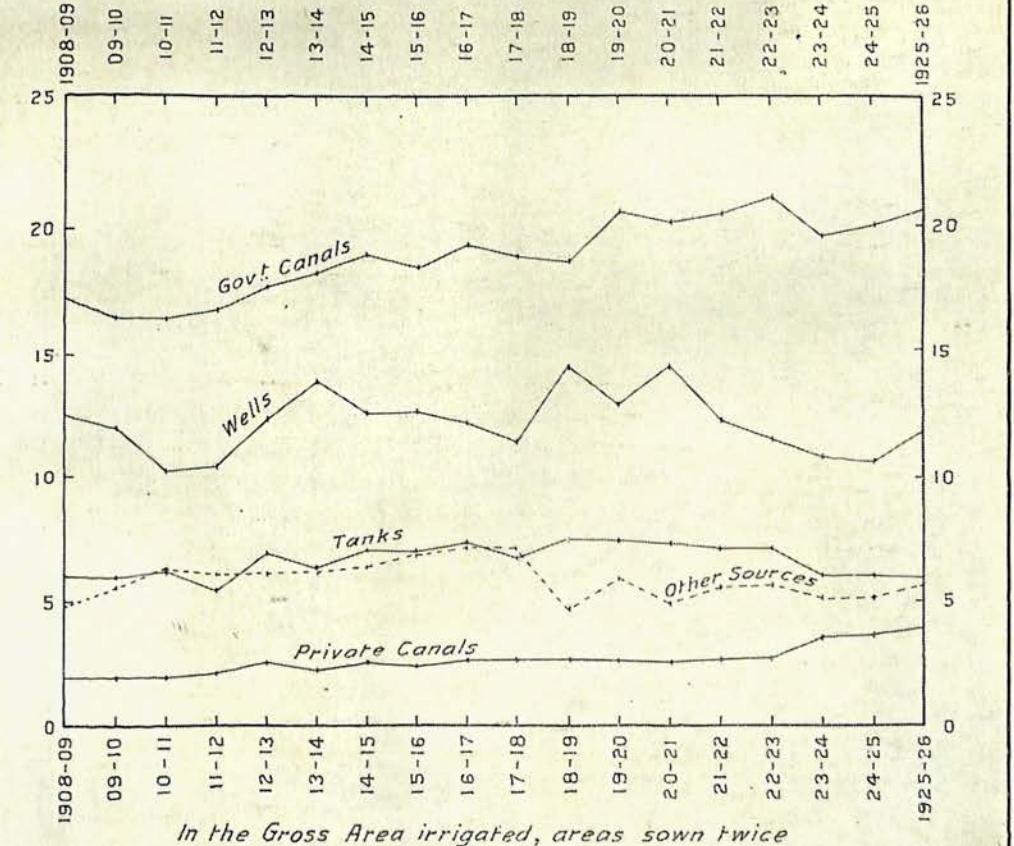
Area irrigated in British India

Note:- *The figures for this graph have been taken from the annual Volumes of Agricultural Statistics of British India.*

(i) Total Gross Area and Total Net Area irrigated.



(ii) Net Area irrigated by various sources.



In the Gross Area irrigated, areas sown twice under irrigation are counted twice.

There are various systems of irrigation in use in India, such as canal, tank, well, lift irrigation from rivers, and the construction of temporary dams for holding up flood water or rainfall, but canals are by far the most important class of irrigation works. Government irrigation works comprise both tanks and canals, the former generally being small devices which derive their importance from their vast numbers. There are over 35,000 petty irrigation works serving from 2½ to 3 million acres of land in Madras alone. In this case it will be seen that tanks are entirely over-shadowed by the canals of the Indian irrigation system. Of two distinct types, canals draw their supplies from perennial rivers or from water stored in artificial reservoirs. The first kind are those based on rivers rising in the Himalayas where the snow acts as an inexhaustible source of supply during the dry months of the year, whilst the latter are principally associated with the rivers rising in the Peninsula proper, where no such natural storage is available. The most important storage works are those in the Madras Presidency, the Deccan, the Central Provinces, and in Bundelkhand, ranging in size from small earthern embankments to enormous dams such as that under construction at Mettur, on the Cauvery, in the Madras Presidency, which will be capable of impounding over 90,000 million cubic feet of water. Canals which draw their supplies from perennial rivers may again be divided into perennial and inundation canals. The former are provided with head-works enabling water to be drawn from the river irrespective of its natural level by means of some obstruction placed in its bed whereby the water may reach the height required to secure admission to the canal. Within this class fall the great perennial systems of the Punjab and the United Provinces. Inundation canals have no such means of control, and water only finds its way into them when the natural level of the river reaches the necessary height. The most important inundation canals in India are those in Sind, and indeed upon them depends the whole irrigation of the Province at present. They also exist in the Punjab, and draw their supplies from the Indus and its tributaries.

During the year 1927-28 the total area, excluding Indian States, under irrigation by Government works amounted to 27·5 million acres. This represented 12 per cent. of the entire cropped area of the country, and was $\frac{5}{6}$ million acres below the record area of 28½ million acres irrigated in 1922-23. The total length of main and branch canals and distributaries in operation amounted to about

67,000 miles, whilst the estimated value of the crops supplied with water from Government works was Rs. 132 crores. The area irrigated was largest in the Punjab, where 10·4 million acres were irrigated during the year. In addition 664,579 acres were irrigated from channels which, although drawing their supplies from British canals, lie wholly in the Indian States. Next among the Indian provinces came the Madras Presidency with an area of 7·2 million acres, followed by Sind with 3·4 million acres, and the United Provinces with 2·3 million acres. The total capital outlay on irrigation and navigation works, including works under construction, amounted at the end of the year 1927-28 to Rs. 115·3 crores. The gross revenue was Rs. 12·1 crores, and the working expenses Rs. 4·7 crores. The net return on capital is therefore 6·4 per cent.

* * *

Reference may now be made to some of the more important irrigation projects under construction. The greatest of these are the Lloyd Sukkur Barrage in Sind and the Sutlej Valley Project in the Punjab. The Lloyd Barrage scheme is one of the largest irrigation projects which has hitherto been undertaken in any part of the world. The salient features of the scheme are a Barrage across the river Indus about a mile long, which will be completed in the year 1932, when irrigation will commence by means of seven large canals taking off above the Barrage—four from the left bank and three from the right bank. The total area commanded by this scheme is approximately 8½ million acres. The present annual cultivation in Sind is only 3½ million acres. This will be increased, when the scheme is completed and fully developed, to 7 million acres. Since the inception of the scheme, in July, 1923, considerable progress has been made in various directions. The seven regulators which form the controls at the head of the seven canals leading from the Barrage have been constructed and brought almost to completion. The super-structure of five scouring sluices and one-and-a-half spans of the Barrage proper on the right bank was brought up to Reduced Level 215·0 for the gate bridge portion only. The main floors, aprons and concrete paving were completed for the whole area covered by these sluices and Barrage spans. On the left bank seven scouring sluices and two-and-a-half spans of the Barrage were completed up to Reduced Level 201 for the road bridge arches. The cofferdams for enclosing space for 23 spans of the Barrage on both banks have been completed for work during the season 1928-29.

Contemporarily with this work, at Sukkur canal excavation has been actively in progress. The total quantity of earth work to be carried out in this scheme, excluding the water courses, is 555 crores of cubic feet, of which more than one-third has been completed. The designs for all the distributary systems were completed during the year under review. The sanctioned estimate of the cost of the scheme amounts to £13·8 millions

The next great irrigation scheme in progress is the Sutlej Valley Project in the Punjab. There are on both banks of the River Sutlej, in British territory on the north and in Bahawalpur State territory on the south, a long series of inundation canals which draw their supplies from the river whenever the water is high enough to permit it. These canals are liable to all the drawbacks of irrigation by inundation. There are no weirs at their heads and, in many cases, no means of controlling the volume of water entering them. Consequently, while the water supplies are assured during the monsoon months of a normal year, they are liable to serious fluctuations according to seasonal conditions. In a year of inferior rainfall little water enters the canals. In a year of heavy rainfall they are liable to grave damage by floods. It is to remedy this state of affairs that the Sutlej Valley Project has been taken in hand. By it, the existing canals will be given an assured and controlled supply of water from April to October, and their scope will be extended so as to embrace the whole of the low-lying area in the river valley. Further, perennial irrigation will be afforded to the uplands of both banks which are at present entirely unirrigated, and, owing to the low rainfall of the locality, are lying waste. The Sutlej Valley Project consists of four weirs, three on the Sutlej, and one on the combined Sutlej and Chenab, with ten main canals taking off from above them. This multiplicity of canals and weirs seems a peculiar feature of the scheme, until it is realised that the project consists of four inter-connected systems, each of the first magnitude. The canals are designed to utilise 48,500 cusecs of water during the hot weather and the monsoon, and 7,000 cusecs during the cold weather. Over 5 million acres will be irrigated, of which 2 millions will be in the Punjab, 2·8 in Bahawalpur, and 0·34 million in Bikaner. The full value of the project will be understood when it is said that it will bring $3\frac{3}{4}$ million acres of desert waste under cultivation. Three out of the four head-works projected have been completed, and a total of Rs. 1,467 lakhs had been expended by the end of the year 1927-28. The sanctioned estimate of the cost of the scheme

amounts to Rs. 2,386 lakhs. (This amount was sanctioned in April last.)

* * *

On December 11th, 1928, the Sarda River Irrigation scheme was formally put into service by Sir Malcolm Hailey, Governor of the United Provinces. The River Sarda rises in the Himalayas north of Lucknow and flows in a south-easterly direction. Its name is changed to Chauka some distance before it joins the river Gogra which, in turn, makes confluence with the Ganges near Chapra. This scheme was originally sanctioned in two portions, the Sarda Kichha Feeder Project, comprising the head-works and the main line and western branch of the system, which were sanctioned in 1919, and the Sarda (Oudh) Canal, comprising the Southern branches, which were sanctioned in 1921. The whole system embraces some 650 miles of main canal and branches, 3,600 miles of distributaries, and 110 miles of escapes. The entire system will irrigate over one and a third million acres, and produce a return of 7 per cent. on the estimated capital cost of seven million pounds.

Another important irrigation scheme is the Cauvery Reservoir Project in the Madras Presidency, the estimated cost of which amounted to £5·5 millions. This project has been framed with two main objects in view. The first is to improve the existing fluctuating water supplies for the Cauvery Delta irrigation of over a million acres, and secondly to extend irrigation to a new area of 301,000 acres, which will, it is estimated, add 150,000 tons of rice to the food supply of the country. The scheme provides for a large dam at Mettur, on the Cauvery, to store over 90,000 million cubic feet of water and for a canal nearly 88 miles long with a connected distributary system. Good progress was made with the scheme during the year 1927-28.

Other irrigation projects which we may mention are those situated in the Deccan. The Bhandardara Dam, which is the highest in India, has been completed and since the publication of our last report the Lloyd Dam at Bhatgar (in the Bombay Presidency), which is the largest mass of masonry in the world, has been completed. The latter dam was formally opened by His Excellency the Governor of Bombay in October, 1928. Irrigation from the great lakes formed by these dams is rapidly being developed in the valleys below them, the Bhandardara Dam supplying the Pravara Canals and the Lloyd Dam supplying the large Nira Canals

system. Irrigation in the Pravara area has grown very rapidly, and lands on these canals are now covered with valuable sugarcane crops, where before hardly any crops could be grown. The Nira Valley Project, consisting of the new Nira Right Bank Canal and extension of the Nira Left Bank Canal, will command a total culturable area of about 675,000 acres, and this scheme will be the largest in the Deccan. The completion of the great storage works at Bhandardara and at Bhatgar has considerably extended the total irrigable area and when fully developed the present major irrigation schemes in the Deccan will be capable of irrigating over 450,000 acres annually.

Almost every other province has irrigation projects in preparation, and those which are likely to be completed within a reasonable time will, it is estimated, add over six million acres to the irrigated area in the country, whilst by the time the projects now under construction are in full working order, a total of 40 million acres under irrigation is expected. When allowance is made for the natural expansion of existing schemes an ultimate area of 50 million acres under irrigation by Government works is anticipated.

We have seen above that irrigation in India does not end with her canals. Wells are, and always will be, a vital factor in Indian irrigation. In these also Government takes an active interest, which is continually increasing. The improvement of their efficiency by sub-artesian bores and the installation of power pumping plants form one of the principal features of the programme of the engineering section of the Agricultural Department. During the short period of its existence, the department has been instrumental in increasing the capacity of thousands of existing wells, and in digging or sinking an equally large number of new ones. In 1928-29 the number of wells bored by Government was 3,835, of which 2,892 were successful. The number bored in the preceding year was 3,214 of which 2,378 were successful. There is great scope in India for the installation of power pumps for water lifts driven by bullocks or man power. Some progress in this direction has been made, but the plant will be required to be standardized, and capital, or at least credit, provided before this method of lifting water can be adopted on a large scale.

* * *

Having surveyed the work of the three great departments of Agriculture, Forests and Irrigation, we may now turn our attention

to the industrial life of India. Although the percentage of the Indian population which is occupied in industrial occupations may seem small compared to the major portion which gains its living from agriculture and allied pursuits, the actual numbers are very large. India still holds undisputed rank among the great industrial countries in the world, and the memorandum issued from the India Office to the Secretary General of the League of Nations, in 1921, stating India's claim to be regarded as one of the eight States of chief industrial importance in the world, shows the grounds on which that claim is based. In the jute industry India leads the world, and the size of her cotton industry is surpassed by only four countries in the world. She also possesses important and flourishing iron and steel works, mills and foundries, dockyards, paper mills, match factories and so on. A glance at the 1921 census report shows that nearly sixteen million persons were engaged in industrial pursuits in India, nearly two million in transport, and over a quarter of a million in mining. About eighteen million persons are occupied in these three great branches of labour alone in India. The value of manufactured articles exported from India during the year ending March 31st, 1928, was over 60 million pounds sterling.

From this it will be seen that the condition of India's industrial labour is an element of vast importance in the welfare and well-being of the Indian population generally. Unfortunately, the great dearth of statistical and other data concerning the conditions in which the Indian working classes live precludes us from saying very much about labour conditions in this country. Indeed, it was that fact, combined with the increase of industrial unrest, which has been unusually marked in India during the past year, which led to the appointment of the Royal Commission on Labour which was announced in January, 1929, to enquire into and report on the existing conditions of labour in industrial undertakings and plantations in British India. The personnel of the Commission was announced as consisting of the following:—

The Rt. Hon'ble J. H. Whitley (Chairman).
The Rt. Hon'ble V. S. Srinivasa Sastri,
Sir Alexander Murray.
Sir Ibrahim Rahimtoollah.
Sir Victor Sassoon.

Mr. N. M. Joshi, M.L.A.
Mr. A. G. Clow, I.C.S.
Mr. G. D. Birla, M.L.A.
Mr. John Cliff.
Diwan Chaman Lal, M.L.A.
Miss Beryl M. Le Poer-Power.
Mr. Kabiruddin Ahmad, M.L.A.
Mr. A. Dibden, } Joint Secretaries.
Mr. Shamaldhari Lal, I.C.S., }

A few years ago the Labour Office of the Bombay Secretariat made enquiries into the conditions of life, housing, wages and standard of living generally of the industrial population, but the subject is so vast that very little further can be done until a proper system of recording statistical data has been instituted. The annual reports on the working of the Indian Mines Act and the Indian Factories Act, and the activities of various other government or quasi-government institutions have done something to lighten the darkness, but obviously the time has now come for a comprehensive survey into Indian industrial labour conditions.

* * *

Mention was made last year of the intention of the Government of India to address the local Governments on the subject of the possibility of introducing a scheme of sickness insurance either on the lines of the draft convention adopted by the Tenth International Labour Conference, or on different lines. The local Governments were addressed on the matter in September, 1928, and their replies have been received.

The International Labour Conference at its eleventh session, held in May-June, 1928, adopted a draft convention and a recommendation on the subject of minimum wage-fixing machinery. The text of the draft convention and the recommendation and the report of the delegates of the Government of India to the eleventh International Labour Conference have been published. The question whether the convention should be ratified or not, and whether the recommendation should be accepted is at present under consideration.

The year 1928-29 saw a good deal of labour legislation either brought forward or enacted in the Central Legislature. During

the short time that the Workmen's Compensation Act, 1923, has been in force, a number of amendments have suggested themselves or have been proposed by the Commissioners for Workmen's Compensation and local Governments. An amending Bill to give effect to some of the proposals was introduced on the 14th September, 1928, in the Legislative Assembly. The Bill was confined to the amendment of those sections, or parts of sections, which are admittedly defective and to the introduction of changes which were likely to raise no important controversial points and which would be generally recognised as improvements. The Bill was passed during the opening session of 1929. The local Governments were addressed in connection with more fundamental changes in the Act. The Indian Trade Unions Act, 1926, was amended during the year to remove a technical defect.

The question of undertaking legislation to secure the prompt payment of wages and to regulate the imposition of fines in industries was further considered in consultation with the departments interested in the matter. The deliberations of the Royal Commission on Labour will no doubt enable the Government of India to judge the directions in which further legislation is desirable to improve the condition of industrial workers with regard to this particular question.

* * *

The latest report on the working of the Factories Act relates to the year 1927. The number of factories increased from 7,251 to 7,515 during the year, all the major provinces showing an increase with the exception of the Punjab, where there was a decrease of 2. A large part of this increase was accounted for by the addition of 121 rice mills. In one of the sections of the Factories Act all Provincial Governments are empowered to notify as factories establishments which employ simultaneously no less than 10 persons on any one day of the year. The total number of factories so notified during the year 1927 rose from 122 in the preceding year to 160, mainly due to the increase of 32 in the Central Provinces and Berar. The factory population of India has now risen from 1,518,391 to 1,533,382. The only provinces and administrations which have no share in this increase are Bombay, the Punjab and the North-West Frontier Province, Ajmer-Merwara, Bangalore and Coorg. The only substantial reduction was in the Punjab, where a decrease of 2,560 is ascribed to the poor cotton crop and

to the centralisation of the Railway Workshops resulting in the closing down of the locomotive, carriage and wagon workshops at Rawalpindi. In Bombay the decrease was mainly in the Ginning and Pressing Industry, due to the poor crop in several areas. In spite of further reduction in the number of employees in the Jute Factories in Bengal there was a substantial increase in the factory population in the province owing to the increased employment in Iron and Steel Smelting Works and allied engineering concerns. There was also a notable increase in Madras, which was due to the increase in the number of factories. The steady increase in the employment of women which has been noticed in previous reports went on unchecked during the year, the total number rising from 249,669 in 1926 to 253,158. The number of children employed in factories fell from 60,049 in 1926 to 57,562, thereby maintaining the downward trend in the employment of children which was referred to in last year's report. This decrease is due to a greater restriction which the Factories Act imposes on the employment of children, as compared to the employment of adults, and also to the increasing efficiency of the arrangements for the certification of children. The percentage of factories maintaining a week of 48 hours per man remains the same as last year, namely 27. In 14 per cent. more the men employed worked for 54 hours or less. The number of men working more than 54 hours a week was 59 per cent. For women the corresponding percentages are 31,13 and 56. These figures do not indicate any material change in the situation as regards adults, but it is satisfactory to note that the percentage of factories which limit the hours of work for children to 30 in the week increased from 30 in 1926 to 36 in the year under review. No reduction has been effected in the number of factories in which the majority of parties were exempted from certain sections of the Act. In fact the figures show a general increase, except in regard to exemptions from section 27, limiting the hours of work to 60 in any one week, the striking reduction under which is partly counterbalanced by the new exemptions from the provisions of section 26, relating to the fixation of the hours of employment, appearing against Bengal and Assam. The reduction from 330 to 2 in the number of exemptions from the provisions of section 27 in the Punjab is due to the fact that the short period exemptions which were granted annually to the Cotton Ginning Factories were apparently not found necessary during the year under review. The number of reported accidents of all kinds rose

from 14,866 in 1926 to 15,711. The total number of fatal accidents, however, fell from 270 to 242. Bombay was largely responsible for the increased number of accidents, the figures for 1927 showing an increase of 816 over the previous year's figures. In Bengal the corresponding increase was 541. In the majority of other provinces there was a considerable decrease in the number of reported accidents. It is satisfactory to note that progress in the fencing of dangerous machinery is being maintained in all provinces, and that the Factory Inspectors are doing all they can to encourage the managements with which they deal to give particular attention to safety measures. The value of safety posters as an aid in the reduction of accidents is gaining increasing recognition, particularly in the Railway Workshops, and it is interesting to find that the Millowners' Mutual Assurance Association in Bombay have agreed to bear the cost of some of these posters for the textile industry.

In the matter of housing the progress made during the year is inconsiderable. Mention may, however, be made of the Housing scheme undertaken by the Government of India at Nasik Road (between Bombay and Poona) for their employees in the factories for the printing of Stamps and Currency Notes. A new town has risen in this place, housing nearly 3,000 persons in comfort.

The number of convictions obtained during the year for the contravention of the Factories Act was 1,420, the number of persons convicted being 432. The corresponding figures for 1926 were 1,417 and 349. Advance in this respect is particularly marked in Madras and the Punjab. There are satisfactory indications of increasing strictness in the enforcing of the provisions of the Act, though there are continued complaints as to the inadequacy of fines imposed by Magistrates on Factory Managers convicted of offences under the Act. The percentage of factories inspected during the year was 89 against 88 in 1926, the total number of factories inspected being 6,692 compared with 6,399 in 1926.

* * *

The Indian Mines Amendment Bill, to which a reference was made in last year's report, was passed by the Indian Legislature as the Indian Mines (Amendment) Act, 1928 (Act XIII of 1928), and received the assent of the Governor-General on the 20th September, 1928. The main provisions of the Act relating to the restrictions of the daily hours of work and the introduction of a

system of shifts in mines do not, however, come into force until the 7th April, 1930.

Section 29 (J) of the Indian Mines Act, 1923, empowers the Governor-General-in-Council to make regulations restricting or regulating the employment in mines, or in any class of mines, of women, either below ground or on particular kinds of labour which are attended by danger to the life, safety or health of women. The question of prohibiting the employment of women underground in mines has been under the consideration of the Government of India for some time past. After obtaining the opinions of the local Governments and the mining interests concerned the Governor-General-in-Council has now issued final regulations on the subject which prohibit absolutely, with effect from the 1st July, 1929, the employment of women underground in all mines in British India with the exception of the coal mines in Bengal, Bihar and Orissa and the Central Provinces, and the Salt mines in the Punjab. In the case of these excepted classes of mines, which employ a large number of women, an immediate prohibition of the employment of women underground would have caused serious dislocation of the industry. A period of grace of 10 years has, therefore, been allowed during which the proportion of women to the total number of underground workers employed in the excepted mines will be gradually reduced till the process of elimination is finally completed at the end of the period, *i.e.*, in July, 1939.

The Annual Report of the Chief Inspector of Mines for the year 1927 shows that the daily average number of persons employed in mines during that period was 269,290, an increase of 9,177 persons compared with the preceding year. Of these persons 118,616 work underground, 77,725 in open workings, and 72,949 on the surface; 190,697 were males, 78,593 were females. In coal mines 165,213 persons of both sexes were employed. Of these 33,841 were women employed chiefly as loaders. The actual number of women working underground in coal mines was 28,041. The total output of coal in 1927 was 21,108,976 tons, valued at Rs. 9,00,68,624. This increase of 1,015,952 tons was 5·06 per cent. more than in the previous year, and a figure which has only been exceeded in 1919, when the record output of twenty-one and three-quarter million tons was produced.

During the year 1927 there were 209 fatal accidents, eleven more than in 1926 and six less than the average number in the preceding five years. These accidents involved the loss of 247 lives, which is

twenty more than in the previous year. Of these persons 217 were males and 30 were females. There were in addition 680 serious accidents involving injuries to 713 persons. The death rate per thousand persons employed above and below ground was 0·92, while that of the preceding five years was 1·11.

Since the Indian Workmen's Compensation Act, 1923, came into force an association called the Calcutta Claims Bureau has been formed by the representatives of twenty-seven of the leading insurance companies in India. During the year 1927 the Bureau dealt with nearly three thousand claims, of which a small number were claims made by employees in mines.

It is satisfactory to note that the Workmen's Compensation Act is becoming increasingly better known and better understood, with the consequence that applications for claims have greatly increased. The result is that a large number of claims are being contested, and the work of the Commissioners under the Act is on the increase. The Act is a very beneficial addition to Indian labour legislation which has only now commenced to be appreciated to any extent.

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A discussion of industrial conditions in India naturally leads us to the subject of unemployment. Here again the absence of statistical and other data is a handicap, and so all that can be done is to refer to the subject in somewhat vague and general terms. This much, however, can be said: the problem of unemployment in India is very different from the corresponding problem in England. In this country there is unemployment from time to time in different industries, but normally all the labour available can be absorbed, and very often the trouble is not to find work for the workless but to find workers for the work. Unemployment in Indian industries, in fact, occurs only when scarcity or famine produces partial or complete stoppage of agricultural operations over wide areas, thus throwing into the market agricultural labour or labour employed in industries subsidiary to agriculture. But here it is necessary to draw a distinction between conditions in India at such times and analogous difficulties in Western countries, for a situation of this kind is met in India by the institution of a system of famine relief which has no parallel in other countries referred to. When we talk of unemployment in India, what we have in mind usually is unemployment among the educated

classes, and there is not the least doubt that this constitutes a problem which is becoming more and more serious every year. Higher education in this country is still predominantly of the literary type, and the majority of the graduates look either to the law or to some form of clerical employment for a livelihood. Probably nine graduates in ten of Indian Universities look to Government service in the first place for a living, and if they are disappointed in their hopes in this quarter, their outlook is not a very promising one. Every year the Indian Universities, colleges and high schools turn out many thousands of educated youths in excess of the number of Government or other public jobs available. Among the members of what we might term the educated middle class there is undeniably severe distress on account of unemployment, and in very many cases, even when employment has been found, its remuneration is very meagre and often less than that obtained by the higher classes of artisans. Obviously new avenues of employment for these classes are needed, and the growth of Indian industry and the rise of new forms of industry in this country ought to provide these openings in the future.

CHAPTER IV.

State and People (ii).

PUBLIC HEALTH, EDUCATION, DRINK AND DRUGS.

Although the three subjects discussed in this chapter are Provincial Transferred Subjects, and the two first-mentioned are dealt with in detail in Chapter 10, there are sound reasons for referring to them at this stage. The functions of the Government of India in medicine are, broadly speaking, restricted to the assistance and guidance of research, whilst in education their functions are restricted to the general control of the denominational universities at Benares and Aligarh, and of the University of Delhi; general control of education in the areas under their direct control, such as the North-West Frontier Province; control over Chiefs' Colleges; and the safeguarding of the administration of central subjects. The Government of India also exercises certain powers in respect of infectious and contagious diseases, takes part in medical activities of an international kind, and maintains certain departmental cadres to deal with these matters. In short, the Central Government's work in these subjects starts where the Provincial is brought to a halt by financial, administrative and territorial restrictions.

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It will be generally agreed that hardly any activity of the State, particularly in a tropical country, is as important as that which is exercised in the field of public health. Even if we are speaking only from the humanitarian point of view, this would be true, but, as is easily apparent from what we have said in the previous chapter, in addition to the alleviation of suffering which results from such activity, economic results of vast importance follow from every improvement in public health. Some of the most striking evidence given before the Royal Commission on Agriculture was concerned with this subject, and we can draw a very good illustration of this argument from the most common disease of India, namely malaria. No part of India is free from this scourge, and the number of days of work which are lost every year on its account must run into many millions. The members of every class and occupation in India are affected, and not only the

actual days lost are to be counted, but the weakening effects of malaria on the human system must also be taken into consideration, for it saps the energy and reduces the efficiency of its victims. In other parts of India, commonly prevalent diseases like hookworm, beri-beri, etc., supplement the havoc wrought by malaria, whilst destructive epidemics like cholera, plague and small pox, which so frequently sweep different areas of India, take heavy toll. It must be remembered that a death in India may be a very ruinous thing for a family since it may result in extravagant expenditure on the funeral ceremony, may lead to the un-economic partition of land, and produce a number of other disastrous effects. The chart which is reproduced on another page will show the reader, without a wearisome repetition of statistics, the toll of human life taken in this country by diseases and insanitary conditions, many of which can be prevented or improved. The part played by the Central Government in the improvement of Public Health has been already briefly outlined, and since the financial condition of India has improved appreciably in recent years the Indian Government is now able to give increasing help to Medical Research.

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With the adoption of the programme of work of the Indian Research Fund Association for the year 1928-29, recommended by the Scientific Advisory Board and finally approved by the Governing Body, it was apprehended that there would be a deficit in the budget for that year, but in view of certain officers carrying out researches having proceeded on leave and the consequent saving on account of their pay and also other unforeseen savings, the apprehension proved groundless, and the Association carried out the programme as it stood. During the year the Government of India gave a grant of Rs. 7,50,000 to the Association for the furtherance of Medical Research and to meet the pay and allowances of the Officers of the Medical Research Department lent to the Association to carry out inquiries. The Association financed 50 inquiries in 1928-29 in the field of medical research, including investigations into various aspects of malaria, plague, cholera, tuberculosis, indigenous drugs, material mortality and morbidity in child-birth in India, anti-rabic vaccine experiments, relapsing fever, drug addiction in India, inquiry into the changes that occur in the blood in certain tropical diseases, kala-azar, guineaworm treatment, helminthology, nutritional diseases, tuberculosis, the study of

d'Herelle's Bacteriophage for dysentery and cholera, inquiry into the distribution of blood groups in Indian Races, osteomalacia and several enquiries on other diseases. The Association also continued its contributions towards the cost of two professorships at the Calcutta School of Tropical Medicine and Hygiene, and the pay of the Leprosy worker employed at the same school, and also towards the upkeep of the Imperial Bureau of Entomology in London (£500). The Association also bore half the expenses incurred in connection with the deputation of Dr. J. C. Mukerji, of the Lucknow University, to the Laboratory Conference on the Sero-diagnosis of syphilis at Copenhagen. A grant from the Government of India towards the cost of the Malaria Survey of India was also sanctioned.

The sixth Conference of Medical Research Workers was held in Calcutta between the 18th and the 20th December, 1928, and was followed by the Annual Meeting of the Scientific Advisory Board on the 21st December, 1928. The programme of work for the year 1929-30 was considered and scrutinised. On account of shortage of available funds a few of the inquiries were stopped and the activities of some were limited. Nevertheless a comprehensive programme of research into most of the principal diseases in India was drawn up. Two schemes for the furtherance of medical research and higher education in Public Health are at present under the consideration of the Government of India. One of these concerns the proposed establishment of an all-India Institute for Education and Research in Public Health for which the Rockfeller Foundation in America has made a generous offer of assistance. In November, 1928, the Public Health Commissioner with the Government of India visited the United States of America on the invitation of the Rockfeller Foundation and completed the arrangements which have led to an acceptance by the Government of India of this generous offer. The second scheme is the result of the report of the Fletcher Committee, which suggested the establishment of an enlarged Central Institute of Medical Research at Dehra-Dun instead of the present Institute in Kasauli.

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An important session of the Advisory Council of the League of Nations Health Organisation, Eastern Bureau, was held at Singapore in February, 1929. Colonel J. D. Graham, C.I.E., I.M.S., Public Health Commissioner with the Government of India, attend-

ed as a representative of the Government of India, and was unanimously selected Chairman of the Advisory Council for the year 1929.

During 1928 the Government of India was represented at the meetings of the Permanent Committee of the International Office of Public Hygiene, the International Conference on Rat Destruction held at Paris and Le Havre in May, 1928, the Royal Sanitary Institute Congress held at Plymouth in July, 1928, the Centenary Celebration of the Faculty of Medicine, Cairo, and the International Congress of Tropical Medicine and Hygiene, held in Cairo in December, 1928.

In accordance with the new organisation scheme announced in May, 1928, the existing rights and prospects of Indian Medical Service officers in civil employ, who will become surplus with the introduction of the scheme, are to be fully safeguarded. The detailed measures to safeguard the prospects of those already in civil employ are now being considered. It has been decided that until the existing and accruing rights of Indian Medical Service officers in civil employ at the time of the introduction of the scheme are fully liquidated the posts of Surgeons-General and Inspectors-General of Civil Hospitals will be filled by such officers in consultation with the local government concerned, the power of nomination being reserved to the Governor-General-in-Council.

* * *

The General Medical Council have extended recognition of the M.B., B.S., degrees of the Bombay, Lahore, Lucknow and Madras Universities and the M.B. degree of the Calcutta University obtained after 12th May, 1928, under the new regulations, until 31st July, 1929, on the conditions that a satisfactory report on a final examination in Medicine, Surgery, and Midwifery held during 1928-29, by each of these Universities from an official Inspector appointed by the Government of India and approved by the General Medical Council is received by the latter before July, 1929. Consequently the examinations of the Universities of Calcutta, Madras and Lucknow were inspected in the autumn of 1928, and the examinations of Rangoon, Punjab, Bombay and Patna in March and April, 1929.

* * *

The question of the establishment of an All-India Medical Council to regulate medical education in India and maintain a register of medical graduates on the lines of the General Medical Council of Great Britain is still under consideration. Similarly the question of appointing a Commissioner of Medical Qualifications and Standards, pending the establishment of an All-India Medical Council, is also still under consideration.

The Central Medical Service in this country is the world-famed Indian Medical Service, which has produced a number of devoted and brilliant investigators into tropical diseases. The members of this Service furnish the medical officers of the Indian Army, direct the medical administration of the Provinces, provide teachers in the medical colleges and serve as Civil Surgeons in charge of the more important districts in each Province.

* * *

The main features of the scheme for the re-organisation of the Medical Services in India, referred to in last year's report, have been accepted by the Secretary of State. Briefly, the scheme is that the suggested unification of the Military Medical Services in India should be abandoned, that an Indian Medical Service constituted on the same broad lines as at present should be retained primarily for the purpose of meeting the needs of the Indian Army, and that in order to maintain the necessary war reserve of military medical officers and to provide European medical attendance for European Officers of the Superior Civil Services and their families, provincial Governments should be required to employ a stated number of Indian Medical Service Officers. The new scheme involved the employment on the civil side of 302 officers of the Indian Medical Service, and a communique announcing the scheme in the final form was issued in May, 1928. In brief, the result of the re-organisation is that fewer posts will now be reserved for officers of the Indian Medical Service than before, and Provincial Governments will consequently be able gradually to add 90 posts to their own provincial medical services.

* * *

Among the various movements permanently affecting the physical well-being of the people of India, the one encompassed in the term " physical education " has come to have a large and ever increasing place of influence. So generally has the need for it

been recognised that a clamour for " compulsory " physical education in all educational institutions is heard on every hand. In the Primary and Secondary Schools the work is gradually emerging from the " Drill Master " stage of " Physical Jerks " for all, regardless of age, sex or condition, to the more scientific forms adapted to the various stages of physical, mental and social growth and development of the child. In the Universities the movement is still left largely to the students to carry on voluntarily, though in special cases such as Calcutta University, Punjab University and in several of the Colleges affiliated to Bombay University, a beginning has been made in University control and direction. The Report of the Beasley Committee in Madras and the work of the Munshi Committee in Bombay, during the past year, are deserving of special mention as attempts to adequately meet the needs of the new movement.

But Physical Education in its broader aspects extends beyond the scope of purely educational institutions, which reach only the school-going population, to the much larger groups of industrials and non-student groups. One such extension having great significance and value is the so-called Public Playground Movement, now rapidly developing in several of the larger cities such as Calcutta, Madras and Bombay. Here, under Municipal control and aided by the trained physical Directors of the Y.M.C.A., are found reserved areas equipped with special apparatus with trained leaders in charge, where hundreds of children and the young men of the district come daily, not only for recreation and health development, but also to acquire unconsciously in group organisations, the fundamentals of law-abiding citizens. The Police authorities support this work wholeheartedly for its social values.

A third manifestation of the modern movement of Physical Education in India is the rapid and far-flung development of athletic and sports club teams whose number is legion and whose players enter the various leagues, tournaments and other forms of competition in such games as foot-ball, hockey, tennis and cricket. This development is assuming large proportions and bids fair to hold a very large place in Indian life and thought, for not only do thousands of players participate, but tens of thousands come to play the rôle of spectators.

No movement of the sort described above can hope to develop satisfactorily unless it is wisely and capably led and directed. The

National Y.M.C.A. School of Physical Education in Madras is, perhaps, the outstanding institution for the training of such leaders in India. Its student body is recruited from all parts of India. Its courses of study are recognised by Madras, Bengal, the Punjab, Assam and Burma, as well as several of the Indian States, and students are officially deputed from most of these places. Its graduates are in great demand as Physical Directors by educational institutions, municipal playgrounds and welfare organisations.

* * *

The circumstances in which many of the women of India live their lives has aroused widespread interest in the institutions of child-marriage and in the provision of medical attendance for the millions of women whom ancient custom still keeps behind the purdah. As the years pass on these matters continue to occupy the attention of private and official persons and institutions in India to a greater extent, and the views of the few advanced reformers which India possesses are able to gain increasing support year by year. The provision of medical assistance for Indian women was first undertaken by the Countess of Dufferin, wife of the Viceroy of India, in the eighties of last century. She it was who first lifted the purdah to admit skilled assistance to the women and girls who lived behind it, and since that time the wives of other Viceroys have extended and developed her work, until to-day we find no less than three important institutions at work providing medical relief for Indian women. Unfortunately these institutions are neither entirely official nor entirely non-official, and incapable of classification either as central or provincial subjects. The first of these institutions, founded by the Countess of Dufferin and commonly known by her name, has for its object the training of women as doctors, hospital assistants, nurses and midwives, as well as the provision of dispensaries, wards and hospitals. The institution made an excellent start, but after a few years it became clear that its income was insufficient for the fulfilment of its objects, and that the remuneration which it offered to women doctors was inadequate. The net result of this was that in 1914 the Women's Medical Service was established, and the Government of India now pays the Countess of Dufferin's Fund a subsidy of three hundred and seventy thousand rupees per annum.

* * *

The year 1928 saw a serious disappointment in connection with the Women's Medical Service in India. An endeavour to increase the number of first class medical women in the Service by an augmented subsidy from the Government of India met with refusal on the plea that as medical relief in provinces was a transferred subject and the question of the propriety or otherwise of central revenues being expended on objects which primarily benefit the provinces raised important constitutional issues which would come within the purview of the Indian Statutory Commission, the Government of India did not consider it proper at present to throw any further burden on Imperial revenues on account of the Women's Medical Service. Consequently, the cadre of the Women's Medical Service, which was forty-four in 1927, was reduced to forty-two in 1928, and was forty-one in January, 1929—twenty-two of Indian domicile and nineteen British.

The appeal by the Council of the Countess of Dufferin's Fund for grants from the Provinces to meet half the salaries of the Women's Medical Service employed in charge of women's hospitals in those provinces met with scant response. Bombay, Bengal, Madras and the Punjab refused any assistance; Bihar and Orissa and the Central Provinces gave the sum asked for; the United Provinces has not replied at all. This state of affairs seems to indicate that if the scheme is to be financed entirely by the provinces it might not be possible to provide adequate medical aid to the women of India. So convinced of this was the Association for providing Medical Aid to the Women of India that it submitted a memorandum to the Royal Statutory Commission, pleading for a change in the Devolution Rules, so that the subject of medical relief by women for the women of India may be brought within the category of Central subjects, and with the help of an increased contribution from the Government of India, in addition to its present subsidy of Rs. 3,70,000, the Women's Medical Service can be put on a proper basis. The memorandum referred to above is printed in this book as appendix No. 3.

* * *

The Training Reserve of the Women's Medical Service, through which selected Indian graduates in medicine receive post-graduate training and experience prior to the admission of its members to the Women's Medical Service, has fulfilled its purpose as far as funds permitted. During the year under review two graduates,

after three years' post-graduate training in India, were sent to England and one of these, after obtaining a British qualification, was admitted to the Women's Medical Service; the other is still in London. Three other graduates of Indian Universities were admitted to the training reserve. During the year the Association of Medical Women in India, an Association which has been in existence for about 24 years, and which has a membership of about 340, representing about three quarters of the total number of women doctors practising in India, whether as missionaries, or in provincial or Dufferin services, or as private practitioners, drew up a memorandum which 8 of its members presented to Her Excellency Lady Irwin, soliciting her help by increasing medical aid by women to the women of this country. Among other things the memorandum stated the fact that the social prejudices which to a large extent forbade Indian women to attend a general hospital or to accept treatment from men make a larger and better system of medical relief for women in India an urgent necessity. Further, after touching on the amount of unrelieved suffering due to the lack of medical aid, the smallness of the number of medical women in India, and the very large amount of maternal and Infantile mortality compared to other countries, the memorandum pointed out that the population of India includes 117,500,000 women, and that little or nothing has been done in the direction of research or legislation to better their lot in life. The memorandum concluded by suggesting an increase of the Women's Medical Service, the appointment by local governments of medical women to administrate women's medical work, more generous aid for charitable hospitals for women, and the provision of medical aid by women to rural areas. As regards medical preventive work, the memorandum suggested the appointment of medical women in connection with the office of the Commissioner for Public Health with the Government of India for the organisation of maternity and child welfare work, the appointment of medical women to the office of the Directors of Public Health in the provinces, a Government system of grants in aid to approved schemes of maternity and child welfare, the appointment of medical women to carry on research into the causes of maternal and infant mortality, facilities for the training of medical women in preventive medicine, and facilities for the training of health visitors. No one can doubt the rights of the Association of Medical Women in India to speak as they have done. None know better than its members the crying needs of

the women and children of India, both from the standpoint of medical relief and that of the prevention of disease. To exercise these activities adequately the Association asks for medical women in an administrative capacity in the provinces as Assistants or Deputy Directors of Public Health and Civil Medical Administrators, their activities being chiefly directed to maternity and child welfare work, medical examination of school girls, training and examination of midwives and *dais*, in addition to the inspection of women's hospitals. The Association rightly feels that until medical women, intimately acquainted with the conditions prevailing in India, are given an official position in each province whence reports and information can reach the ears of the authorities financially concerned, little can be known and little can be done to remedy the very grave defects under which medical relief for women and child welfare work are carried on in India.

* * *

Twenty years ago the Association of Medical Women, in a similar deputation, approached the then Vicerine and the Secretary of State for India in London, and pointed out defects in the conditions of service and status of medical women in Dufferin services, pleading for the inclusion of women on the Dufferin Council, a medical woman as Secretary of the Dufferin Fund, medical women as inspectresses of women's hospitals, and the formation of a Government service for women on the lines of the Indian Medical Service. It has taken a long time, but most of these reforms have now been carried out to the undoubted benefit of the Dufferin Fund and all that it stands for in human life. Now both the Association and the Dufferin Council join hands in making further requests, convinced more than ever of the need of provision of the best rather than the cheapest of women doctors for the public now awakening and beginning to clamour for up-to-date hospitals, trained midwives, health and the reduction of infant mortality.

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It should be mentioned that Her Excellency Lady Irwin had already issued an appeal to governors' wives of all Provinces in India for a definite sum of money to carry on an enquiry, started by Doctor Margaret Balfour in 1926, into the causes above mentioned. This appeal met with a generous response, and a skilled woman research worker was recruited to undertake this work at

the Haffkine Institute, Bombay, and she began her investigation in February, 1929. The money subscribed will provide for the expenses of this research worker for two years only.

* * *

The income of the Dufferin Fund proper, amounting as it does to rupees 41,000, was spent, as formerly, on scholarships for women at medical colleges, 30 in number, and grants in aid to hospitals for women during the year.

A scheme for the better training of nurses at the three existing nurses' training schools in India was drawn up. During 1928 the cost involved over a lakh of rupees. Application was made to the Rockfeller Foundation for this recurring amount, the local governments being asked to provide the necessary building and equipment for the nurses' training schools. Unfortunately the Rockfeller Foundation were unable to make any grant, as the training of nurses is no longer included in their activities.

The Victoria Memorial Scholarships Fund, which is the second institution working for the relief of women in India, was created by the late Lady Curzon. The Fund exists for the training of indigenous *dais*, and during the year under review continued to work along lines similar to those followed in previous years. The most interesting fact which can be reported is that its promoters are not altogether satisfied with work it is doing. The Fund, it may be explained, was initiated by the late Lady Curzon expressly for the training of indigenous *dais*. This was nearly 30 years ago, and conditions in India have changed a great deal since then. Some ten years ago the Committee of the Fund made an enquiry as to whether the income at its disposal was being spent in the most advantageous possible manner. As a result of this enquiry the Committee decided to adhere to the original objects of the Fund. Progress during the last ten years, however, has been more rapid than in the twenty years preceding, and it is quite evident that midwifery practice in India is passing into different hands. This is especially noticeable in the more advanced parts of India. In the Madras Presidency the number of trained midwives is quite large, and they are now able to compete successfully with the old "barber" midwives. This is due, of course, not merely to the increase in the number of trained midwives, but to an increased appreciation on the part of the public of their services;

the two things naturally proceeding *pari passu*. This process of ousting the indigenous *dai* from her place as the sole attendant on child-birth is slowly spreading to other parts of India. In many reports from different centres there is evidence that a class of women, in whose families midwifery has never been a hereditary profession, are attending classes, earning certificates and taking up the work as a means of livelihood. This process is naturally going on most in the towns, where there are facilities for training for midwifery, and will take a long time to spread to India's rural areas. It is very satisfactory that it should be so, and the progress along these lines is likely to be accelerated more and more as the years go on.

One result of the entrance of women into the medical profession who have hitherto not taken up the work is that the *dais* are beginning to feel their position less secure, and so they, too, are beginning to seek modern training in midwifery. The Victoria Memorial Scholarship Fund has assisted in the training of these indigenous *dais* by giving them small stipends for attendance at classes. In the past this attendance has seldom been of a voluntary character, but pressure has been brought to bear on the women to come to the classes. Now that others are willing to be trained the *dais* may be less unwilling to accept the training which has been offered to them, and it is an open question whether some of the money spent in the past on indigenous *dais* should not now be diverted to the training of a different class of women.

There has been a good deal of talk for many years about the iniquities of the *dai* class and the need of getting rid of the *dai*. Two things, however, must be kept in mind in this connection. One is the fact that there is nothing inherently wicked about the *dais*. They are as capable as any other class of being trained into useful midwives. It is their ignorance, coupled with the degrading and menial tasks which their clients have forced them to perform, which has made them a source of danger to the public. Proper training and the acceptance by the public of the idea that the work of the midwife is an honourable calling, and must receive an adequate remuneration is all that is required to make the indigenous *dai* harmless and useful. Furthermore, she often has experience to aid her, and this is a great asset. The second point to be remembered is that in attempting to oust the *dai* steps must be taken to replace her by someone as good, if not better. Many of those who now come forward for training are still illiterate women, and they

frequently have no experience beyond the small number of confinements required by the examination.

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The Bill for the Registration of Nurses and Midwives introduced into the Madras Legislative Council is about to become law. A Bill with a similar aim has been drawn up for the Punjab, and will be introduced during the forthcoming session. These very hopeful signs of the times are the fruits of years of labour such as the work of the Victoria Memorial Scholarship Fund represents in India.

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The third of the institutions working for the welfare of Indian women is the Lady Chelmsford League, which is closely associated with that of the Women's Medical Service in India and is likewise proceeding along the lines familiar to the readers of this annual volume. A large proportion of the income of the League is spent in aiding the Health Schools which now train health visitors in all the larger provinces in India. The latest Health School which has been founded, and which is assisted by the League, is that at Lucknow, which trains workers for the United Provinces. The instruction is given in the vernacular. The school was started in October, 1928, and though the first class was a small one there is every reason to believe that candidates will come forward in increasing numbers for training. The League no longer requires to assist the Health School at Lahore, which is now entirely supported by the Punjab Government. This and the other Health Schools continue to do good work, though lack of suitable candidates for training continues to be a stumbling block.

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The lack of facilities for training medical women in health work is a subject which is occupying the attention of the Lady Chelmsford League. To-day it is found that many local bodies, especially in the larger places, are anxious to employ medical women. This is sometimes because they prefer a doctor to a health visitor, but also because the work legitimately demands a medical woman, owing to its amount and the number of workers employed. In a large municipality, for instance, where there are a number of health centres, classes for midwives and other activities of the

Head Provincial Hospitals staffed at their Headquarters
Sub-Hospitals
Dispensaries
Railways
Roads
Rivers
Canals
Boundaries
Provincial
Native States
Political
Towns
Villages
Hills
Forests
Cultivation
Deserts
Swamps
Lakes
Sea
Coast Line
Islands
Reefs
Shoals
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Light Vessels
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Bay of Bengal
Arabian Sea
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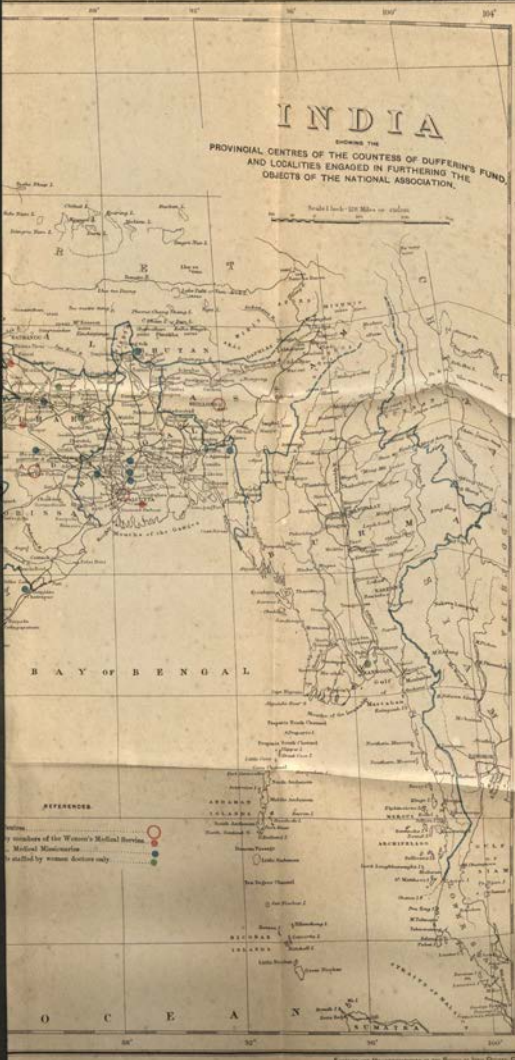
British Islands
Andaman Islands
Nicobar Islands
Ceylon
Maldive Islands
Laccadive Islands
Persian Gulf
Red Sea
Gulf of Aden
Gulf of Oman
Gulf of Cambay
Gulf of Kutch
Gulf of Manaar
Palk Strait
Mouths of the Indus
Mouths of the Ganges
Mouths of the Irrawaddy
Mouths of the Godavery
Mouths of the Krishna
Mouths of the Cauvery
Mouths of the Mahanadi
Mouths of the Narbada
Mouths of the Tapti
Mouths of the Mahi
Mouths of the Sabarmati
Mouths of the Luni
Mouths of the Hooghly
Mouths of the Brahmaputra
Mouths of the Meghna
Mouths of the Salween
Mouths of the Sittang
Mouths of the Pegu
Mouths of the Arakan
Mouths of the Tenasserim
Mouths of the Kistna
Mouths of the Pennar
Mouths of the Palar
Mouths of the Vaigai
Mouths of the Tambraparni
Mouths of the Periyar
Mouths of the Bharathapuzha
Mouths of the Chaliyar
Mouths of the Kadalundi
Mouths of the Ponnani
Mouths of the Kuttippuram
Mouths of the Kallayi
Mouths of the Kadalundi
Mouths of the Ponnani
Mouths of the Kuttippuram
Mouths of the Kallayi


INDIA
SHOWING THE
PROVINCIAL CENTRES OF THE COUNTESS OF DUFFERIN'S FUND,
AND LOCALITIES ENGAGED IN FURTHERING THE
OBJECTS OF THE NATIONAL ASSOCIATION.
BAY of BENGAL
O C E A N
REFERENCES.

Health Department, a medical woman is required who will organise the work under the Medical Officer of Health. At present there is no means of training medical women for this work, which after all is a special branch of medicine as much as surgery or radiology. In addition there is urgent need for medical women who will organize the work on a provincial basis. There must be supervision and inspection of child welfare work, some uniformity of standards and some co-ordination of the work. Moreover, each province needs a worker who will do the propaganda work and planning of new schemes, the persuasion of local bodies and the maintenance of touch with all-India and the world wide movements of a similar nature which are essential to advance.

The propaganda work of the League goes on unceasingly and consists of publishing leaflets, pamphlets, books and posters in various languages all over India. Baby Week continues to be celebrated with a good deal of enthusiasm in various parts of India, and its results are apparent in various ways, such as the establishment of Health centres, small maternity homes, and the appointment of trained midwives.

A handsome silver challenge cup, called the " Irwin Cup ", was presented for competition among local Baby Weeks by Rajah Raghandanan Prasad Singh, M.L.A., during the year. The cup was awarded to Penukonda, in the Madras Presidency, for the great amount of originality, enterprise and labour shown in devising and carrying out the Baby Week. Three places in the Punjab, namely Rewari, Attock and Gujrat were runners up, and made exceedingly good efforts.

A glance at the map on the opposite page is all that is now necessary to enable the reader to appreciate the magnificent work which is being done by the members of the Women's Medical Service in India. As we have seen, it has serious difficulties to contend with, and the members of the Service consequently work under great disabilities. The Central Government is unwilling to incur any additional expense because women doctors work mostly in the Governors' Provinces, while certain provincial governments are unwilling to make any contribution to the cause of women doctors because they believe that the Central Government should bear all the expense. They have far more work than they can cope with, and their service is not pensionable. It is to be hoped that before the publication of our next annual report the position of the

Women's Medical Service in India will be greatly improved, and at least the major portion of the various suggestions set forward in the memorandum to Her Excellency Lady Irwin and also the Simon Commission will be in operation.

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Mention was made in last year's report of a Committee appointed by the Government to enquire into the question of the allocation of a permanent site for Delhi University Buildings, their character, construction and equipment and the extent and nature of assistance, both capital and recurring, which the Government of India might give to the University. The Committee issued their Report in December, 1927, which suggested three possible ways of dealing with the University; but recommended the third course, which was the acceptance in general of the policy of the Government of India as embodied in the Delhi University Act of 1922, and the adoption of a programme which would result in the realisation, so far as practicable of an ideal of a unitary teaching and residential University. This would not remove intermediate classes from the control of the University or make the intermediate examination of an Indian University the normal avenue of admission to the University courses. It would allow the constituent colleges to retain their self-contained and individualistic character and to undertake teaching for the inter-arts inter-science and B.A. (pass) courses. The University (central organisation) would take complete responsibility for the teaching of the Science, B.A. (honours) and M.A. classes. It would also supplement the course given for the B.A. (pass) course and continue to be in full charge of local education. The University (central organisation) and the three first grade colleges would be provided with certain buildings and lands on the Viceregal Estate, Old Delhi, free of cost. The Committee's scheme was estimated to involve, from 1927-28 to 1931-32, a cash expenditure of Rs. 30,35,000, *i.e.*, Rs. 9,35,000 in the shape of recurring grants and Rs. 21,00,000 as capital grants. This estimate was exclusive of the book value of the buildings and lands of the Viceregal Estate, amounting to Rs. 15,13,000, the Government of India's recurring grants to the colleges, the cost of certain new Faculties, and such capital grants as the colleges might require to adapt the Viceregal Estate buildings to their needs. The Committee also made several other recommendations. The Report of the Committee was still under consideration in March, 1929, and the Government of

India were holding conferences with representatives of the colleges regarding the future of the University. Meanwhile an additional non-recurring grant of Rs. 45,000 was sanctioned by the Government of India, so as to give a total grant of Rs. 1,20,000 in 1928-29 in order to enable the University to maintain its existing commitments.

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The Benares Hindu University is an all-India institution classified as a central subject under the Devolution Rules framed under section 45A of the Government of India Act. The University is aided by the Government of India. It received an annual grant of Rs. 1 lakh up to 1925-26 and apart from a small grant of Rs. 50,000 in 1916, and another of Rs. 77,000 in 1919-20 no capital grant of any kind was made to it. In 1925-26, the University made representations for additional subventions and the under-mentioned grants were sanctioned by the Government of India:—

(*a*) The enhancement of the recurring grant from Rs. 1 lakh to Rs. 1¼ lakhs in 1926-27 and 1927-28 on the understanding that amounts of the recurring grants to be made in 1928-29 and onwards would be reconsidered in 1927-28.

(*b*) A special non-recurring grant of 5 lakhs payable in two instalments—one of Rs. 2 lakhs in 1926-27 and the other of Rs. 3 lakhs in 1927-28 solely for the liquidation of indebtedness.

The question of the recurring grant was considered in 1927-28, but no decision could then be reached for want of adequate information. The additional grant of Rs. 25,000 was therefore continued in 1928-29. The grants given by the Government of India had fallen short of the needs of the University, and repeated representations were made by it for further financial assistance:—

(*a*) to wipe off its debt which stood at Rs. 15 lakhs and had been incurred to meet large expenditure on buildings and equipment;

(*b*) to balance its budget;

(*c*) to improve its staff; and

(*d*) to meet the cost of its normal expansion.

The University found it extremely difficult to persuade the public to subscribe money to repay its debt. Nor could it effect any retrenchment of expenditure without impairing its efficiency. It was at the same time suffering both in staff and equipment for want of funds. The Government of India recognised the desirability of rendering additional financial assistance to the University in order to help it to wipe off its debt and to provide for legitimate expansion on a scale not inferior to that of the Universities aided by local governments. They therefore sanctioned in 1929 the enhancement of their recurring grant to Rs. 3 lakhs in 1929-30 and subsequent years as a permanent measure, and the payment of a non-recurring grant of Rs. 15 lakhs spread over the years 1929-30 to 1931-41. These grants would not, however, be paid unless the University agreed to provide, to the satisfaction of the Government of India, safeguards against incurring further debts.

* * *

The Education Department of the Office of the High Commissioner for India was constituted on a permanent basis in 1925 as a result of the recommendations made in the Report of the Committee of Indian Students, 1921-22. The work of the Department had increased considerably since its constitution, and additional assistance was needed to maintain its efficiency. The Government of India, therefore, sanctioned in 1929 a scheme put forward by the High Commissioner for India for strengthening the staff of the Department. The additional recurring cost of the scheme was estimated to amount to about £500 in 1929-30.

* * *

We may now turn our attention to the steps which the Government of India and certain provincial governments are taking to deal with the drink and drug evil in India. The policy of the Government of India in the matter of opium exports is governed by international agreements. In fact the Government of India have gone further than is required by these agreements, and the export of opium to any non-Asiatic country other than the United Kingdom is prohibited, and export to the latter is for medical and scientific purposes only, and is strictly controlled by the Import Certificate system. The same system was applied to other drugs covered by the Hague Convention in 1923 by an order which was revised in 1926 so as to fall into line with the definitions contained

in the Geneva Convention. In June, 1926, it was announced that the extinction of exports of opium for other than medical and scientific purposes would be accomplished in ten years, that is, no opium will be exported for purposes other than medical and scientific after December 31, 1935. The exports in 1927 were 90 per cent. of the exports in 1926, and 80 per cent. in 1928. During the current year these will be 70 per cent. of the exports in 1926, and so on. With effect from the 19th March, 1925, the transhipment at any port in British India of any of the drugs covered by the Hague Convention was prohibited unless covered by an export authorization or diversion certificate issued by the exporting country, and this order was revised in the light of the Geneva Convention on the 12th February, 1927.

* * *

The present opium policy of the Government of India has entailed enormous financial sacrifices. During the last eleven years, the area under poppy cultivation in India has been reduced by more than 76 per cent., and the present cultivation of the poppy is strictly confined to the United Provinces of Agra and Oudh, the amount grown elsewhere being negligible. The area under poppy cultivation in British India in 1927 was 52,278 acres, as compared with 154,621 acres in the year 1920. The Government of India have also entered into negotiations with those Indian States in which opium was produced in order to bring them in line with the policy adopted by the Imperial Government in accordance with the terms of the Hague Convention. The total quantity of crude opium purchased from Indian States was reduced from 11,400 maunds in 1924-25 to 6,500 maunds in 1925-26. (A *maund* is equal to 82 $\frac{2}{7}$ lbs.)

In our last year's report reference was made to a Committee of Enquiry appointed by the Government of India to investigate the question of the relations between the Government of India and the Indian States in the matter of opium. The report of the Committee is still under consideration.

Statistics and reports issued by the League of Nations Secretariat afford ample proof of the earnestness and success with which the Government of India have fulfilled the duties imposed upon them by international obligations. Within their territories both the Central Government and the Governments of the Provinces are grappling seriously with the problem of " black spots " in British India. It might be explained at this point, that except in Burma

and Assam opium smoking, which was recognised by the first Opium Conference at Geneva in 1925 as being the real opium evil, is not a general practice. The Governments of the Provinces have acted in this matter both singly and in concert with each other. In September, 1926, a conference of provincial ministers charged with the administration of excise was held to discuss the co-ordination of excise policy in certain matters throughout India. As a result of this conference the Government of India suggested to the Provincial Governments certain measures which might contribute towards a solution of the problem of eradicating the evils referred to. The result of the conference was that the Governments of Bengal, the Central Provinces, Bihar and Orissa, Bombay and Madras all appointed Committees to enquire into conditions in certain specified areas, and the Government of the United Provinces asked its existing licensing boards to state their views in regard to the position within certain municipal limits after such enquiry as they considered necessary. The proposal to organise some system of liaison between the various governmental authorities has been abandoned, and the Government of India are now considering the desirability of holding a conference after the reports of the various local investigations have been received for the purposes of collating and comparing the results obtained before the different Provincial Governments decide individually on the action to be taken in regard to these reports.

* * *

The year under review saw the introduction of a " Dangerous Drugs Bill ", 1928, a measure to centralise and vest in the Governor-General-in-Council the control over certain operations relating to dangerous drugs, and to increase and render uniform throughout British India the penalties for offences relating to such operations. The Bill was circulated for eliciting opinions thereon in September, 1928, and is likely to be passed shortly.

* * *

The figures showing the decline in the consumption of opium throughout India during the past decade or two are very striking. Between 1910-11 and 1927-28 the consumption has fallen in Madras from 1,039 maunds to 866 maunds; in Bombay from 1,435 maunds to 711 maunds; in Bengal from 1,626 maunds to 994 maunds; in Burma from 1,444 maunds to 622 maunds; in Bihar and Orissa from 882 maunds to 611 maunds; in the United Provinces from 1,545

maunds to 569 maunds; in the Punjab from 1,584 maunds to 1,014 maunds; in the Central Provinces from 1,307 maunds to 626 maunds; in Assam from 1,509 maunds to 722 maunds; in the North-West Frontier Province from 69 maunds to 50 maunds; and in Baluchistan from 15 maunds to 13 maunds. In 1910-11 the consumption for the whole of British India was 12,527 maunds; in 1927-28 it was 6,926 maunds. At the same time the revenue derived from opium in the various provinces of India, owing to the enhanced price at which the drug is sold, has risen from Rs. 1·63 crores in 1910-11 to Rs. 3·38 crores in 1927-28.

Of late years, much has been heard of the increased use of cocaine and allied drugs in the larger cities of India, and from time to time newspapers print somewhat alarming articles on this subject. It is almost superfluous to say that this feature of life in the big cities is a matter of much concern to excise and police officers. The authorities are fully alive to the danger, and have developed, and are continually improving, detective and preventive measures, and captures of this drug and arrests of those who traffic in them are common occurrences. The true coca plant is not grown in India, nor is cocaine manufactured, but notwithstanding several Governments have, as a matter of precaution, passed Acts prohibiting the cultivation of cocaine-yielding plants, and these Acts have now received the assent of the Governor-General.

* * *

As regards opium smoking the following is now the general position in India. The aim of the policy of the Government of India is the ultimate suppression of the use of prepared opium for smoking. Total prohibition of smoking has as yet been enforced only in Assam. Elsewhere the sale of prepared opium is forbidden, and so is its manufacture except by an individual who prepares it for his own use from opium lawfully in his possession. The Government of Burma have adopted the most stringent measures for the ultimate extinction of opium smoking. In 1924 they issued rules prohibiting any person other than a registered smoker from possessing prepared opium, and a register for opium smokers was opened for six months from the 9th January, 1924. No new names can be added to the register, and with the gradual disappearance of the persons on the register on the 8th July 1924, opium smoking will cease to be permitted except in a few backward tracts. The total number of registered smokers of opium on 31st December, 1927,

was 14,003. In Bihar and Orissa opium smoking is prohibited except by licensed smokers. Under the respective Opium Smoking Acts of the Punjab and the United Provinces, opium smoking in company has been prohibited in those provinces; and the provisions of the Punjab Opium Smoking Act have been extended to Delhi, the North West Frontier Province and Baluchistan. Under the Punjab Opium Smoking Act an assembly of *three or more persons*, and under the United Provinces Opium Smoking Act an assembly of *two or more persons* is designated an opium smoking assembly if the common object of the persons composing that assembly is to smoke or prepare opium for smoking purposes, and penalties are prescribed for being a member of such an assembly. In Bengal, legislation is being initiated to make opium smoking by persons other than registered smokers a penal offence, and a smokers' register will be opened with a view to the ultimate eradication of the evil. The Government of the Central Provinces are proposing to introduce a Bill in the Legislative Council of that province with a view to prohibiting opium smoking in company. They also propose to introduce a system of registration and rationing of habitual addicts. The Madras Government have postponed the consideration of their Bill, which aimed at prohibiting opium smoking altogether in the Presidency, pending the passage of the Dangerous Drugs Bill. The Government of Bombay are proposing to prohibit the manufacture, possession and sale of prepared opium except under a license, and maintain a register of persons addicted to the habit.

* * *

The consumption of alcoholic liquors does not provide a serious problem in India except in those bigger centres of population in which industrial labour is concentrated. About a quarter of the total population of India—the Muhammadans—are practically outside the range of the drink evil since their religion forbids them to take alcoholic liquor, and this prohibition is for the most part faithfully obeyed. Among the congested labouring population of Bombay and Calcutta and a few lesser places the evil exists to some extent but on the whole it is true to say that the drink problem is not much in evidence in India. There has, however, been a good deal of talk of recent years in most of the Indian Provinces about compulsory prohibition. For many people in India the ideal of total prohibition is not unconnected with politics for, during the non-co-operation agitation, considerable pressure was brought

to bear in some places on drink shop proprietors and would-be drinkers in order to prevent the one class from plying their trade and the other from satisfying their appetite. The object of this pressure was to destroy an important item in the revenues of the Government, chiefly the revenues of the Provincial Governments. Nevertheless the movement towards total prohibition is very largely inspired by genuine reforming zeal, and the general trend of every governing authority in India is to reduce to a minimum the consumption of alcoholic liquors. Absolute prohibition in the sense of ensuring that there shall be no consumption of liquor, except such as is allowed by law, is quite impossible for India in her circumstances. An immense army of preventive agents would have to be employed in every province in order to ensure complete obedience to any law enforcing total prohibition, and the better plan appears to be to continue the present policy adopted by the Government of India and some Provincial Governments in this matter, a plan which aims at inculcating temperance whilst providing facilities for persons requiring wholesome refreshment, but at a price likely to discourage the abuse of intoxicating liquors. The Government of India is not now primarily concerned with the consumption of alcoholic liquors except those imported from abroad, the duty on which forms a useful item in the central revenues of the country. From time to time, however, the subject of alcoholic drinks comes up for discussion in some connection or other in the Legislative Assembly or Council of State, when the Government of India make it clear that their policy in the area subject to their direct administration is to promote and ensure moderation in the use of such liquors. At different times the Government of Bombay, Madras and the United Provinces have accepted prohibition or abstinence in general terms as the goal of their policy, and on October 22nd, 1927, the Madras Legislative Council passed a resolution recommending that the total prohibition of alcoholic drink in the Presidency within the next 20 years should be the declared object of the Provincial Government's policy. In 1926, a local option Bill was passed in Assam, and the Government of the Central Provinces aim at the ultimate extinction of the consumption of country-made spirit. There is, however, reason to believe that there are limits to the policy of checking consumption of liquor by raising the price to a very high figure, for this encourages the manufacture of illicit liquor. The Punjab Government have had to reduce the duty on country spirit, and the Bombay Government,

in their review of the Administration Report of their Excise Department for 1926-27, explained certain financial and administrative difficulties which had arisen out of their policy of partial prohibition, and their resolution of the 11th April, 1928, in which they passed orders on the report of a prohibition (financial) committee appointed by them in 1926. They stated that on account of financial considerations further progress in the direction of prohibition must necessarily be slow. On the whole, therefore, the various governing authorities in this country are adopting all reasonable measures within their power to guard against the spread of the drink habit, and to make it difficult and expensive to gratify.

CHAPTER V.

Communications.

The Railways at present form the most important part of India's system of communications, and the active policy of railway development in every direction which is now being pursued by the Railway Board and by the railway companies of India cannot fail to exercise a profound influence upon rural development generally. With the extension of communications, new markets, new industries and new opportunities are created, which are very vital to an immense country like India. Approximately over seventy-one per cent. of the total route mileage of Indian railways is owned, and over forty-four per cent. is directly managed, by the State. The control, financing and development of the railways of India falls very largely, therefore, on the Central Government which acts in railway matters through the Railway Board. As now constituted the Board consists of a Chief Commissioner, a Financial Commissioner, and three members, one of whom deals with technical subjects, and others with general administration, personnel and traffic. The Financial Commissioner deals with all financial questions. Five Directors assist the Board in the five branches of Civil Engineering, Mechanical Engineering, Traffic, Finance, and Establishments, and by disposing of all matters except those of policy or major importance, relieve the Railway Board of routine work and enable them to concentrate their attention on the larger questions of railway policy. Under the Railway Board each railway has an Agent in supreme charge. Until a few years ago the railways were all administered on the departmental system. The increasing mileage on some of the railways, the growing complexity of traffic problems and modern advances in the science of transportation have necessitated some adjustment in the controlling agency. The old system became unsuited to the working of an increasing traffic over large areas, and the burden falling upon the headquarters staff of the larger railways was so heavy as to render efficient control difficult. A careful analysis of the problem indicated that the remedy lay in adopting a divisional organisation, the main object of which is to fix the responsibility for the whole of the railway work in a certain section of a railway (called a " division ") on one officer

called the Divisional Superintendent. A " division " may be of any length according to circumstances, but is generally a good deal larger than the old railway districts in which, under the departmental system, there were three or more officers each responsible to the head of his department at the headquarters of the railway. Each Divisional Superintendent is directly responsible to the Agent, the administrative head of the whole railway, who has on his staff experts in the several branches of railway work. Naturally, the divisional system is not the same in all its details on every railway. Divisional organisation was introduced on the Great Indian Peninsula Railway in 1922, on the North Western Railway in 1924, and on the East Indian Railway in January 1925. These improvements in organisation were the administrative counterparts of the very fruitful change in the system of railway finance, which, as we shall see in the next chapter, resulted from the convention, concluded in September, 1924, between the Government of India and the Legislative Assembly.

In 1872 the total railway mileage in India was a little over 5,300. At the end of March, 1929, the total route mileage was approximately 40,940, that is, a greater mileage than that possessed by any country in Europe, and almost double the mileage of the United Kingdom. These figures, and the comparison with European countries, are given merely for the purpose of showing the immensity of the effort made in this matter of railway building in India and not in order to suggest that there ought to be any slackening of effort, for it must be remembered that India is as big as the whole of Europe, with the exception of Russia, and it is clear that many gaps in the Indian railway system have got to be filled up before the Government of India can regard their railway system as complete. During the year under review 1,270·24 miles of new railways were opened to public traffic, and the total mileage of railway under construction on March 31st, 1929, was approximately 3,225 miles.

One feature of the Railway Board's programme stands out prominently, and this is the absence of ambitious projects of trunk line construction. The explanation is that India is already well served by trunk lines which follow the outlines of a railway system laid down for her by Lord Dalhousie in the fifties of last century. He foresaw a system of trunk lines connecting the interior of each Presidency with its outlying parts and the different Presidencies

with each other. This scheme was to include a trunk line from Calcutta to Lahore, another from Bombay to the North West of India, another from Madras to Bombay, and a fourth from Madras to the Malabar Coast. Building on this skeleton a number of subsidiary trunk lines have been added from time to time, and there are now only a few gaps left in the main net work.

The position in regard to the important gaps still to be filled is as follows:—

(1) The Central India Coalfields Railway, which will cross the gap lying between the East Indian and Bengal Nagpur Railways in Chota Nagpur and the Central Provinces—certain portions of this line were opened during the year under review, while good progress was made on the others.

(2) The Raipur-Parvatipuram Railway, which will complete the link between the Central Provinces and the East Coast—this line is expected to be completed sometime in 1931.

(3) The Kazipet-Bellarshah Railway, built by His Exalted Highness the Nizam's Government, which effects a saving of about 200 miles in the journey between Madras and Northern India—this line was opened for traffic on 15th November, 1928.

The key-note of the programme to which the Government of India are now working is the filling in of the interstices of the net-work of trunk lines with useful branches and feeders so that the benefits of railway service may be brought right to the doors of the agriculturists and rural population. It will be seen that omitting the two main connections already referred to, namely, the Raipur-Parvatipuram line and the Central India Coalfields Railway, the Government sanctioned 12 new lines during the year under review. Of these, construction on eight lines, a total length of 430·50 miles, was started during the year, while the remaining four, 222·50 miles long, are to be undertaken in the near future. These are, in fact, lines designed primarily to serve the interests of the agriculturist and to enable produce to be moved and marketed. The programme, may, therefore, be described as an agricultural railway programme. But to fulfil this character it has been necessary to devise cheaply constructed lines, because construction to

the ordinary standards would have meant either that the lines will not earn a fair return on their capital, or that they will impose an insupportable burden on the carriage of produce and passengers in the very places where it is wished to encourage traffic. Whether these new lines with their low speeds and low standards of amenities will escape severe criticism remains to be seen, but if they are successful they will pay for gradual improvement up to the standard of the older lines.

In addition to their expenditure on new construction the Railway Board and the Agents of the different railways are undertaking more outlay on improvements in open line facilities, which includes large sums for the improvement of rails and sleepers, for the remodelling of station yards and marshalling yards, and for electrification. During 1927-28 and 1928-29 no less than $2\frac{1}{4}$ crores of rupees were provided in each year for the standard of comfort for lower class passengers, attention being paid particularly to water supply, waiting rooms and halls, refreshment rooms, booking arrangements and improvements to coaching stock.

In addition to the construction of new lines a number of important open line works were under construction during the year, and good progress is reported to have been made on them. Of these important open line works, special mention may be made of the provision of additional tracks and improved facilities on the Madras Suburban section of the South Indian Railway, and the construction of bridges over the Irrawaddy at Sagaing and over the Indus at Kalabagh.

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The Local Advisory Committees constitute a valuable link between Railway Administrations and the travelling public, as they afford opportunities for the discussion of matters of interest and importance to the railways' clientele. One hundred and fifteen meetings of these Committees on State-owned railways were held during the year, as compared with one hundred and eight in the previous year and ninety-two in 1926-27. As in the previous year the subjects discussed at these meetings cover a very wide range of topics, and to the list given in last year's report of matters discussed may now be added the following:—extension of through train services and through carriage services; issue of return tickets for week-ends; railway arrangements for fairs and other large

gatherings; running of demonstration trains; provision of steam coach service; running of Indian refreshment cars; booking of luggage; provision of level-crossings and overbridges; opening of city booking offices; waiting rooms; reservation of compartments and the acceleration of train services.

The public appreciation of the utility of these Advisory Committees is reflected in the demands that are made for the constitution of Branch Advisory Committees at other centres in addition to those constituted at the headquarters of Railways. Two such branches were formed during the year—one by the Great Indian Peninsula Railway at Cawnpore, and the other by the Madras and Southern Mahratta Railway at Hubli.

* * *

The Railway Rates Advisory Committee, which was constituted in 1926 and referred to in last year's report, continued to function during the year under review. The Committee reported on nine cases that had been referred to them, and at the close of the year there were three cases still under consideration.

In the last year's report references were made to the electrification which is in progress on the Great Indian Peninsula and Bombay, Baroda and Central India Railways, the first object of which is to relieve the congestion of passenger traffic in the thickly populated areas round Bombay. This work has been carried on during the year now under review, and is now nearing completion on both lines.

As mentioned in last year's report, following the recommendations of the expert Committee presided over by Sir Vincent Raven, a number of Railway Workshops were re-modelled and a number of alterations to workshops carried out on the lines recommended by the Committee.

* * *

The importance of the railways to the life of this country and the wide scope of employment which they offer makes the question of the Indianisation of the railway services of first rate importance. The word " Indianisation ", when used in this connection, is applied to the superior or gazetted ranks of the services, since the personnel of the lower and subordinate ranks is naturally predominantly Indian. The pace of Indianisation of the gazetted services has been accelerated within recent years. Of the permanent gazetted

appointments created during the last year, 68 per cent. were Indians compared with 62 per cent. in 1926-27 and 32 per cent. in 1925-26. Analysed in branches the figures for appointments to the permanent staff show that the percentages of Indians appointed were: to the engineering branch 78, to the traffic and commerce branch and the mechanical branch 36 per cent., and to other branches 57 per cent. On the Company-managed Railways the number of Indians appointed during 1927-28 was 49 per cent. of the total vacancies filled in the case of permanent appointments, and 51 per cent. in the case of temporary posts. In the higher subordinate grades there was an increase of 222 in the number of Indians and a decrease of 36 Europeans.

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As was pointed out in last year's report the recruitment in India of officers of the superior railway services and the increasing complexity of railway operating problems demands improved methods of training the staff in their duties. During the year 80 officers, 486 subordinates and 20 probationer signallers attended the newly established Railway School of Transportation at Chandausi to receive special courses of training. With a view to meet the urgent demand for a Railway Staff College, the Railway Board recently sanctioned the establishment of a Railway Staff College at Dehra Dun at an estimated cost of Rs. 23,37,840. This college is intended primarily for the training of probationer and junior officers already employed on the railways, but classes for senior officers will also be held. Good progress was made on the work of erecting and equipping the college during the year under review. Considerable attention is also being devoted to the training of subordinate staff and there are schools for this purpose at Lyallpur in the Punjab and at Bina in the Central Provinces. These schools will train probationers in the subordinate ranks before they take up their regular duties and will provide instructions for members of the subordinate staff to enable them to qualify for promotion.

* * *

With a view to facilitate the tendering for and purchase of stores the Railway Board, in collaboration with the Indian Stores Department, recently convened a standing committee for the standardisation of railway stores. The personnel of this committee consists of a member of the Railway Board and the Controller of

Stores of the Great Indian Peninsula, North Western, East Indian and Eastern Bengal Railways, and the first meeting was held in January, 1928. The work is naturally one of considerable magnitude. Considerable progress has already been made in providing approved specifications for the more important items of stores in common use on Indian railways.

* * *

About 150 of the new standard types of locomotives were put into service on various Indian railways during the year, and although certain minor defects inseparable from the introduction of new designs have come to light, the locomotives have given ample cause for satisfaction. Similarly most of the new I. R. S. designs of coaching bogies, underframes and wagons became available during the year, and orders for about 3,700 of these types were placed mainly with Indian wagon-building firms.

* * *

The Fuel Economy Committee appointed by the Railway Board continued to hold its periodical meetings during the year under review. The State Railways in India consume something like 4 million tons of fuel per year, so that the importance of the subject can readily be realised. Gratifying results have been already obtained resulting in substantial economies, in some cases in the region of 10 per cent. in comparison with the performance obtained in previous years.

* * *

The Carriage and Wagon Shops of the Indian Railways use annually about 31,500 tons of finished timbers of all kinds. The great majority of this up to recent years has been Burma teak. Efforts have now been made to find substitutes for teak from the numerous species of timber that occur through India and Burma. A plant to kiln-season 3,000 tons annually has been erected at Lillooah, on the East Indian Railway, and will be utilised to season miscellaneous timbers which will be tried as substitutes for teak. Four trial coaches of indigenous species other than Burma teak have also been built by the East Indian Railway. Considerable progress has also been made to increase the range of selection of timber for use as sleepers by introducing special preservative treatment. The North Western Railway now has a large plant at Dhilwan which

is used for the preservative treatment, with creosote, of coniferous timber, and the Assam-Bengal Railway has recently erected a plant to treat Assam timber at Naharkatiya, in the North-East of Assam.

* * *

Third class passenger fares had been reduced in previous years on all State-managed Railways excepting the Eastern Bengal Railway. During the year under review it was felt that conditions warranted a reduction in the third class fares on the Eastern Bengal Railway from the scale of 3½ pies per mile to the following scale:—

	Pies per mile.
For the first 150 miles	3½
For the additional distance in excess of 150 but not exceeding 300 miles	2½
For the additional distance in excess of 300 miles .	1½

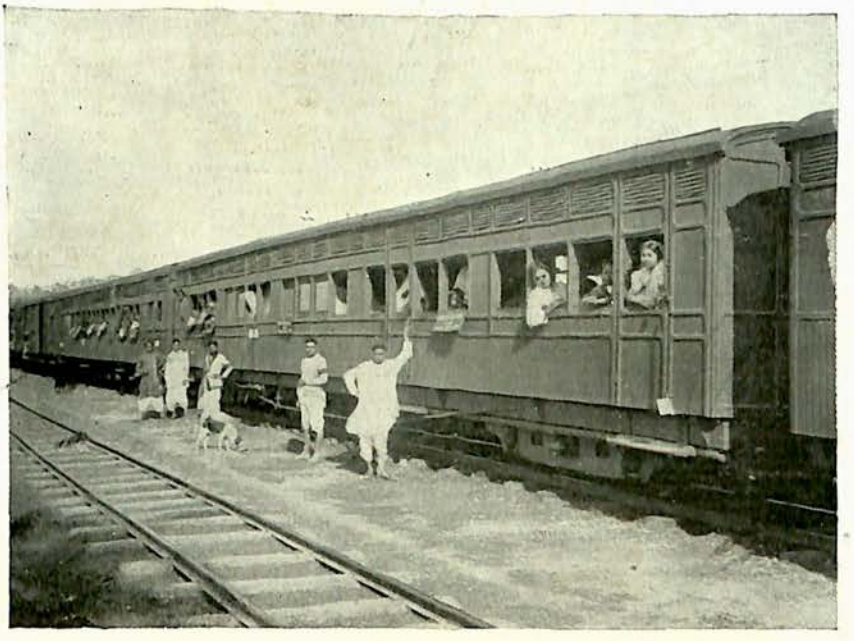
The third class fares over the Burma Railways were also reduced from 1st January, 1929, when the management of that railway was taken over by the State.

* * *

The scheme of separation of Accounts from Audit was first introduced as an experimental measure on the East Indian Railway in December, 1925, and in the following year a Railway Clearing Accounts Office was established and placed as an experiment under the control of the Railway Board with an independent Auditor acting on behalf of the Auditor General. The experiment proved a great success and it was therefore decided, with the approval of the Secretary of State, to adopt the scheme as a permanent measure on all State-managed railways, and to establish the Clearing Accounts Office on a permanent basis. The scheme was introduced on the Burma Railways with effect from the 1st January, 1929, and on the North Western Railway from the 1st April, 1929. It is proposed to introduce it on the Great Indian Peninsula and Eastern Bengal Railways from the 1st October, 1929, and 1st April, 1930, respectively.

* * *

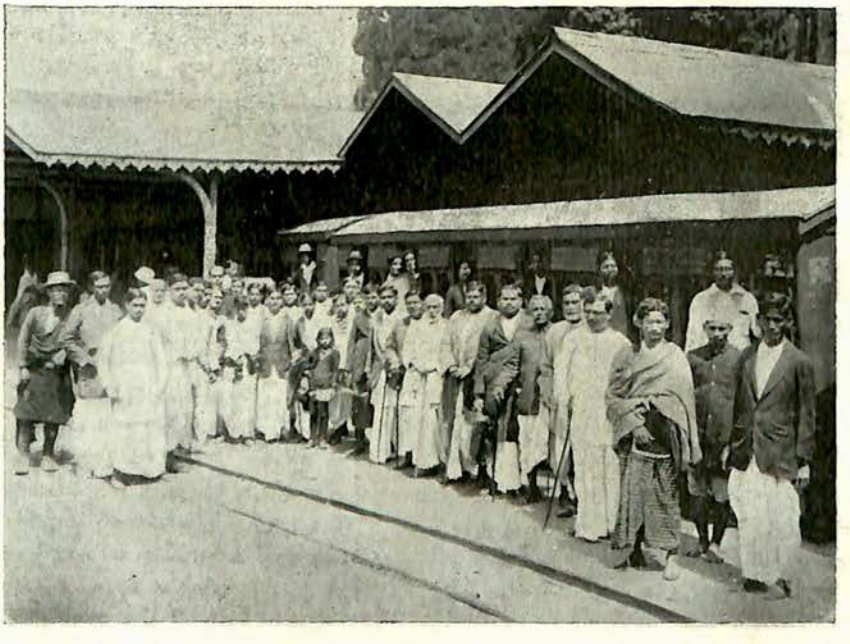
After the transfer of the East Indian and the Great Indian Peninsula Railways to State management the next State-owned and company-managed railway system whose contract could be determined was the Burma Railways. This line was taken over from the Burma Railways Company on the 1st January, 1929, and



Third Class Conducted Excursions *en route* to Kamakhaya.

At the Shrine at Kamakhaya.

Pilgrims waiting for the Steamer for Amingaon.

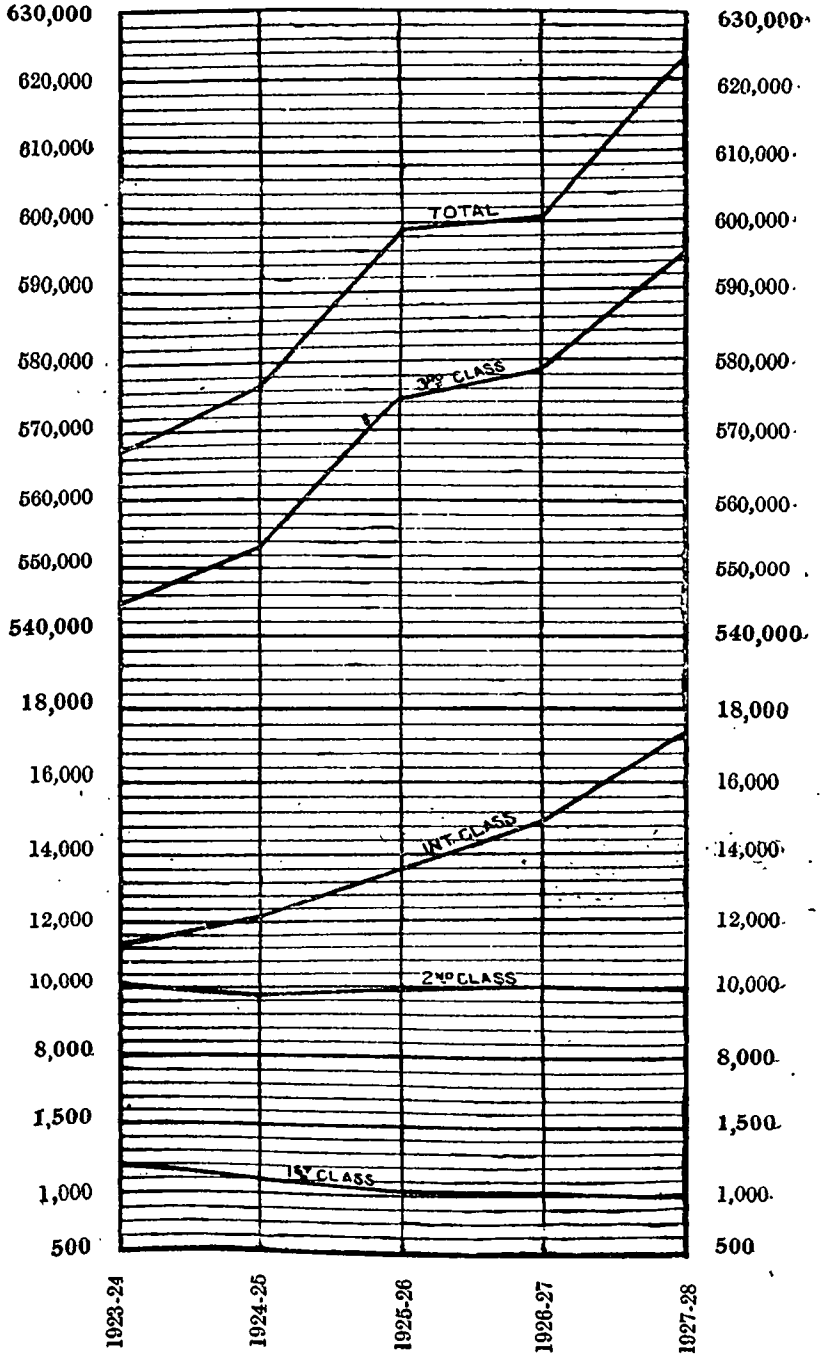


The Darjeeling Excursion Party returning to Calcutta.

DIAGRAM.

Number of Passengers carried on Indian Railways.

(In Thousands.)



it now forms a part of the State-owned railway systems of India, to which it has added a length of some 2,000 miles of metre gauge railway. The decision to take over the line for management by the State was reached after careful consideration and with full regard to the views of the Government and the Legislative Council of Burma, who expressed themselves in favour of State-management. While the transfer of the line to State-management has entailed the payment to the Burma Railways Company of a sum of £3,000,000 it is expected that it will result in a net annual gain to the Government of about half a crore of rupees.

* * *

The Labour position on Indian Railways has assumed considerable importance within recent years, so much so that the Government of India in January, 1929, decided that the appointment of an additional member on the Railway Board, specially to deal with labour problems on Indian railways, was necessary. During the year under review there were three strikes, one on each of the following railways: the East Indian, the South Indian and the Nizam's Guaranteed State Railways. The strike on the East Indian Railway, which started on the 7th March, 1928, with the trouble in the Lillooah workshops, lasted up to the 10th July with subsidiary strikes at Howrah, Ondal and Asansol. On the 30th July the men in the Lillooah shops again downed tools and resorted to disorderly behaviour. The men resumed work on the 8th August, and there has been no disturbance since.

With the exception of the serious disaster at Dankuni, where an express train was derailed owing to a rail having been removed, no serious inconvenience was caused during the strike to the travelling public. As a result of the derailment near Dankuni the engine and five coaches of the train were badly smashed and 18 passengers were killed and 32 injured. There was one other serious incident in connection with this strike. This happened at Bamangachi, where on account of the disorderly behaviour of the workmen and their attempt to induce men to down tools in the locomotive yard the Police were compelled to fire.

The trouble on the South Indian Railway started on the 29th of June, when the workshop staff at Golden Rock, Negapatam, and Podanur downed their tools because the Agent had announced his intention of reducing the number of workshop men by 3,171 men. These men were found surplus to requirements owing to the pro-

posed concentration of the workshops of the railway at Golden Rock, and the introduction of labour-saving devices. A general strike was declared on the 19th of July and spread throughout the metre gauge portion of the South Indian Railway. It lasted till the 30th July. During the short period of the strike there was great dislocation of traffic, and the public were seriously inconvenienced by the strikers attempting to interfere with the running of trains. There was also considerable rioting and stone-throwing, and the Police were compelled to open fire on the crowd on two occasions. At Kattupakam and Kodaikanal Road, on the 21st and 23rd July respectively, owing to the malicious tampering with the permanent way, two passenger trains were derailed. Three passengers were killed and 40 injured, and the railway suffered a loss of about Rs. 1,35,000 in damages to rolling stock.

The strike in the locomotive, carriage, and engineering shops on the Nizam's Guaranteed State Railways was confined mostly to unskilled labourers. It was not of a serious nature and lasted for about 30 working days in all. The men first struck work on the morning of the 16th of August, and resumed work on the 24th idem. They again struck work on the 11th September, and finally resumed work on the 8th October. The causes of this strike are obscure.

* * *

The Publicity Department created by the Railway Board in 1927 was placed on a permanent basis from the 1st January, 1929. There can be no question that the achievement recorded in this field of work has gained a permanent place for publicity as an inseparable partner in the varied phases of business in this country. Railway Publicity continued to receive a warm welcome from all sections of the community, and successfully created and maintained an important link of mutual understanding between Railway administrations and the public. It played a prominent part also in correcting wrongly conceived ideas prevalent as regards travel facilities in India, the measure of its success being the increasing flow of overseas tourist traffic to India, the popularity of students' specials, holiday specials and conducted tours and a greater volume of pilgrim traffic.

The intricate nature of publicity work in India as compared with other countries must be recognised in view of the illiterate

conditions of the great majority of the inhabitants of the country and the lack of knowledge by those that are literate, of a common script and language. In the face of these difficulties the success already achieved by this new department of the Railway Board during the short space of two years is remarkable.

The Central Publicity Bureau, which was first established in April, 1927, in Bombay, was moved to Delhi, the Headquarters of the Railway Board, in March, 1928, to facilitate closer touch with the Board and the co-ordination of publicity work on State Railways. In addition to its administrative control the Bureau is actively employed in the production of publicity material such as Cinema Films, Posters, Publicity Literature and a State Railways Magazine for circulation in India and overseas.

The production of cinema films is concentrated entirely in the Central Publicity Bureau. The films produced are chiefly directed towards encouraging third-class traffic, the improvement of indigenous primary industries, the encouragement of scientific agriculture, attracting overseas traffic, education of the Staff and the travelling public. Films of topical railway events, interesting railway works and the progress of improvements have been produced and screened to create and retain public interest in the railway undertakings. The films produced by the Central Publicity Bureau are circulated to railways for open air exhibition by means of cinema cars. This has, undoubtedly, been the most effective method of conveying information to and creating a strong impression on the minds of the overwhelming illiterate majority in this country. The popularity of these displays can be estimated from the fact that during the six months ending December, 1928, no less than 815,130 spectators were registered to have taken advantage of the 380 shows arranged during the period under reference. Copies of the Railway Board's films have been produced for supply to all State Railways, which are gradually coming into possession of film libraries of their own. A selected number of copies have, also, been sold to other Government Departments and public bodies.

Reciprocal publicity arrangements with overseas railways have grown during 1928-29, and the Bureau is now in touch with most of the European, African, American, Canadian, Australian, Japanese and Mesopotamian rail-road administrations, with whom posters and films for display on their systems, and literature for

distribution, are exchanged. Similar arrangements have been extended to public association not connected with railways.

An interesting feature during the course of the year has been the introduction and development of staff welfare and sports organisation on Indian Railways. A Sports Officer was appointed, whose duties have been to encourage the development of sports and athletic competitions on Indian Railways. Considerable organisation has had to be undertaken in this connection, and a definite advance has already been made in the creating of a sporting spirit and health of the staff. Within a few months of the Sports Officer's appointment football and boxing tournaments, in which all railways participated, were held in Simla during the summer months, and are being followed by hockey tournaments and athletic sports in Delhi before the Railway Board moves to its Summer Headquarters. Great interest has been taken by individual Railway administrations in organising local events with preliminary heats preparatory to the annual meetings. These meetings are calculated to foster the desire for active life, engender *esprit-de-corps* amongst the staff of the railways, and a healthy rivalry with other railways in the field. This new development has also provided a channel of personal touch, otherwise impracticable in large business organisations, between officers and men outside working hours, helping them to acquire a more intimate knowledge of each other, creating a common interest and better understanding.

Demonstration trains for the purpose of educating the Indian cultivator by giving practical demonstrations of scientific methods in farming, cattle breeding and dairying, side by side with Railways propaganda organised in close co-operation with the Provincial Governments, provide an incomparable method of spreading information in connection with Public Health, Veterinary Science and the work of Government Industries and Co-operative Departments. During the year 1928-29 the running of these trains was resumed over the Eastern Bengal Railway and the North Western Railway systems with very great success, and they were visited by large numbers of people in the different places to which they went. The Punjab Government have been so satisfied with the utility of the North Western Railway Demonstration Train that they have insisted on its remaining on tour for 6 months. The East Indian and Great Indian Peninsula Railways are considering the use of similar demonstration trains on their systems.

COVERED WAY CARRIED ON VIADUCT AT CHAMARTOLA, A. B. RAILWAY.

Upper and third class conducted tour specials, as well as holiday and Bazaar special trains, were run by several railways with considerable success. This has provided a new feature of attraction for the public, who look out for these trains with interest. The demand for these services is growing, and has been considerable from educational centres.

* * *

The road system of India is a vital link in her system of communications, for although there has been an impressive growth of railway mileage during the past half century there are still vast areas unserved by the railways. The report of the Royal Commission on Agriculture in India stated, amongst other things, that in the development of communications generally, railways and roads should be regarded as complementary to each other, and that it should be possible to avoid in India the senseless and wasteful competition between rail and motor traffic that is to-day taking place in England and other Western countries. The steady increase of road motor competition in certain parts of India has made the railway authorities chary of constructing branch lines in areas where such competition is likely to threaten their future prospects. The problem can hardly be called a serious one in its present stage, though it will undoubtedly become more acute unless there is more co-operation between roads and railways aspiring to one ideal, namely, the development of transport.

It will be recalled that a special committee consisting of members of the Council of State and the Legislative Assembly was appointed in November, 1927, to examine the desirability of developing the road system of India, the means by which such development could be most suitably financed, and to consider the formation of a Central Road Board for the purpose of advising in regard to, and co-ordinating the policy in respect of, road development in India. The personnel of the Committee was:—

Mr. M. R. Jayakar, Bar.-at-Law, M.L.A. (Chairman).
Diwan Chaman Lal, M.L.A.
The Hon'ble Sir Geoffrey Corbett, K.B.E., C.I.E., I.C.S.
The Hon'ble Sir Arthur Froom, Kt.
Kumar Ganganand Sinha, M.L.A.
Raja Ghazanfar Ali Khan, M.L.A.
Lala Lajpat Rai, M.L.A.

The Hon'ble Mr. Mahmood Suhrawardy.
Mr. Mohammad Anwarul Azim, M.L.A.
Mr. Mohammad Ismail Khan, M.L.A.
The Hon'ble Dr. U. Rama Rau.
Mr. K. V. Rangaswamy Ayyangar, M.L.A.
The Hon'ble Sardar Shivdev Singh Uberoi.
Mr. E. F. Sykes, M.L.A.
Mr. H. F. Knight, I.C.S. (Secretary).
Mr. K. G. Mitchell, A.C.G.I., A.M.Inst. C.E. (Technical Adviser).

The Committee assembled at New Delhi on November 6th, 1927, and a sub-committee was appointed to tour various parts of India and submit reports to the full Committee. Sixty-three witnesses were examined by the full Committee in January, 1928, and the final report was published in November, 1928. A mass of useful statistical, historical and descriptive information on India's road system formed the major portion of the report, in addition to some important recommendations. The Committee were very emphatic regarding the inadequacy of India's road system, and acknowledged that the development of motor traffic is revolutionizing the road problem in this country. They pointed out that it was somewhat incongruous that there should be nearly 40,000 miles of railways in India, while the total mileage of surfaced roads in India is only 59,000, and urged that further development is desirable for the general welfare of the country as a whole and in particular: (*a*) for the better marketing of agricultural produce; (*b*) for the social and political progress of the rural population, which will be advanced by the increased use of motor transport; (*c*) as a complement to railway development. The Committee also acknowledged that road development is now passing beyond the financial capacity of local Governments and local bodies, and is becoming a national interest which may, to some extent, be a proper charge on central revenues.

The Road Development Committee have recommended a scheme for the finance of road development, which includes a proposal that the excise and import duty on motor spirit should be raised from 4 annas to 6 annas per gallon, and that the additional duty of 2 annas should be spent on the development of roads. The proposal has been accepted and the yield of the additional duty during 1929-30 is estimated at about Rs. 80 lakhs. The Committee

considered that the amount realisable annually from the additional duty will not go far to finance road development, but that it is enough at this stage to make a beginning.

Other recommendations made by the Indian Road Development Committee include the appointment of a Road Engineer with the Government of India, a periodical Road Conference, a Standing Committee for Roads, the co-operation of oil companies with the railway administration with a view to reducing the price of petrol in inland towns, and the abolition of all road tolls on traffic.

Before concluding our remarks about India's road system it is but fair to mention that India *can* boast of a number of good main roads, the most famous of which is the Grand Trunk Road which runs from Calcutta to Peshawar. The average Indian district has a few metalled roads linking it up with its neighbours on either side, but very few can boast of an arterial metalled road. In most cases the interior of a district is served by what is termed in India *kachcha* or unmetalled roads of varying degrees of merit.

The table below gives at a glance the percentage of provincial, local and total revenues spent on roads in India; and the incidence of road expenditure per head of population.

NOTE.—*The expenditure taken is that of 1926-27; the revenue taken is the average of the years 1924-25, 1925-26 and 1926-27.*

Province.	Percentage of revenue spent on roads.			Incidence of road expenditure per head of population.		
	Provincial.	Local.	Total	Provincial.	Local.*	Total.
	Per cent.	Per cent.	Per cent.	Annas.	Annas.	Annas.
Madras	2·5	36·2	5·8	1·6	2·8	4·0
Bombay	4·4	15·6	5·5	5·0	1·2	6·7
Bengal	2·8	35·3	5·7	1·0	1·3	2·3
United Provinces	3·2	16·7	5·0	1·4	1·3	2·6
Punjab	6·5	23·0	7·9	5·5	2·2	7·4
Burma	10·1	29·0	11·0	13·5	2·5	15·6
Bihar and Orissa	3·2	24·4	7·3	0·8	1·7	2·5
Central Provinces	8·9	6·1	*8·6	6·3	0·6	6·8
Assam	7·6	61·5	10·9	4·0	2·1	6·0
Total	5·0	24·8	7·0	3·0	1·7	4·5

* Calculated on rural population.

Another link in the chain of Indian communications is the Posts and Telegraphs Department which, in addition to its primary function of providing the Indian public with easy and rapid means of intercourse, is, owing to its ubiquity, called upon to act as the agent to the Government in carrying out other essential services not directly connected with its basic activities. For instance it acts as the banker and agent of the people, enabling them to do their shopping from all distances. It collects customs charges on dutiable articles coming to India by post. It insures the lives of Government employees, and it pays the pensions of retired officials of the Indian Army. It is the custodian of Postal and Telegraphic stores held in reserve for purposes of military mobilisation, and, finally, among a host of miscellaneous activities it sells quinine. The extent to which these useful functions are carried out may be estimated from the fact that at the close of 1927-28 there were 21,608 post offices in India with 108,210 postal officials.

During the year 1927-28, the Posts and Telegraphs Department continued to make steady progress in all branches, and something of the size of its operations may be grasped from the following figures for the year ending 31st March, 1928. A total of 1,348 million postal articles were handled, including 565 million letters, 577 million postcards, 88 million registered newspapers, 102 million packets, and 16·7 million parcels, an increase of 55 million articles over the figures for the previous year. Thirty-nine million money orders of the total value of Rs. 920 millions were issued, on which a sum of Rs. $11\frac{3}{4}$ millions was realised as commission. Out of 1,387 million articles, including money orders, which were posted during the year 99·98 per cent. were actually delivered or paid as compared with 99·96 per cent. out of a total of about 1,330 millions in the preceding year. The percentage of articles which the department failed to deliver is only ·02 and includes a large number of articles with no address of any sort. When it is remembered that large numbers of postal employees have to be recruited from among primitive jungle and hill-folk, and that in many parts of India, mail runners and postmen constantly run the risk of death from wild beasts and accidents by flood and field; the fine standard of achievement shown by these figures will stand out conspicuously.

Arrangements have been made for the transport by the Marseilles-London air route of articles of the letter mail posted in India for Great Britain and Northern Ireland and the Irish Free State. Advantage has also been taken of the Marseilles-Paris section of that route for the transmission of correspondence intended for France.

The limit hitherto placed on the aggregate amount which a person could send by money order in a single day to a foreign country has been withdrawn. The telegraphic money order service has been extended to the Nyasaland Protectorate.

The limit of weight of parcels for foreign countries has in respect of several countries been raised from 11 lbs. to 20 lbs., and the limit up to which foreign postal articles may be insured has been raised to £200 or Rs. 3,000.

The policy of extending postal and telegraph facilities in rural areas continued to be vigorously pursued. During the year 1,324 experimental post offices were opened against 991 in the previous year. Out of 21,608 permanent post offices existing at the end of the year 17,114 were in rural areas, as also were 41,634 of the 58,384 letter boxes and in addition to 144 telegraph offices proper, 4,011 of the post offices were combined post and telegraph offices, and 8,219 were receiving offices where telegrams could be booked for transmission to the nearest telegraph office. The scheme under which a branch postmaster or a village postman authorised by the Head of the Circle accepts inland telegrams in English or in vernacular and sends them on by post to the nearest telegraph office for onward transmission by telegraph having proved a success it has been made permanent, and 99,000 telegrams were collected by these agencies during the year 1927-28 against 79,117 in the previous year.

The total distance over which mails were conveyed during 1927-28 was 166,606 miles, of which motor services contributed 10,511, as compared with 8,319 in the preceding year. There was thus an increase of 2,192 miles in the motor mileage. The Department avails itself of every opportunity of substituting motor services for cart or runner services to the great advantage of the public and at little or no extra cost to the Department.

The Telegraphic Branch of the Department dealt with 16,775,309 inland and 3,198,725 foreign messages of all kinds. Among other

interesting features was the marked reduction in the rates for foreign telegrams. Owing to the stabilisation of the exchange value of the Rupee at 1*s.* 6*d.* the rates for foreign telegrams were generally reduced with effect from the 1st July, 1927. For telegrams to Great Britain and Ireland the rate was fixed at Re. 1-2 per word. In consequence of the reduction in the Cable Company's charges the rates for telegrams to Great Britain and Northern Ireland *viâ* Eastern Cable and Indo-route was further reduced to Re. 1 per word from the 1st September, 1927. From the same date a week-end letter telegram service was introduced with these countries at three annas per word, subject to a minimum charge of twenty words per telegram. A general reduction was also effected in the rates for telegrams to other countries to the West of India with effect from 1st October, 1927.

A notable incident of the year in the Telegraph Branch of the Department was that with a view to provide facilities for telephone subscribers, a system of receiving and despatching telegrams by telephone was introduced. By this system telegrams, Inland and Foreign, other than Press can be telephoned by a telephone subscriber to the Telegraph Office for onward transmission, and telegrams for delivery can be telephoned by the Telegraph Office to the telephone subscribers. Such telegrams are called " Phonograms ". In addition to the usual telegraph charges a small fee of two annas is charged for telephoning such telegrams to the telegraph office. Received telegrams are telephoned to the subscribers free of charge, and a confirmatory copy of the same is sent to him by the first available post.

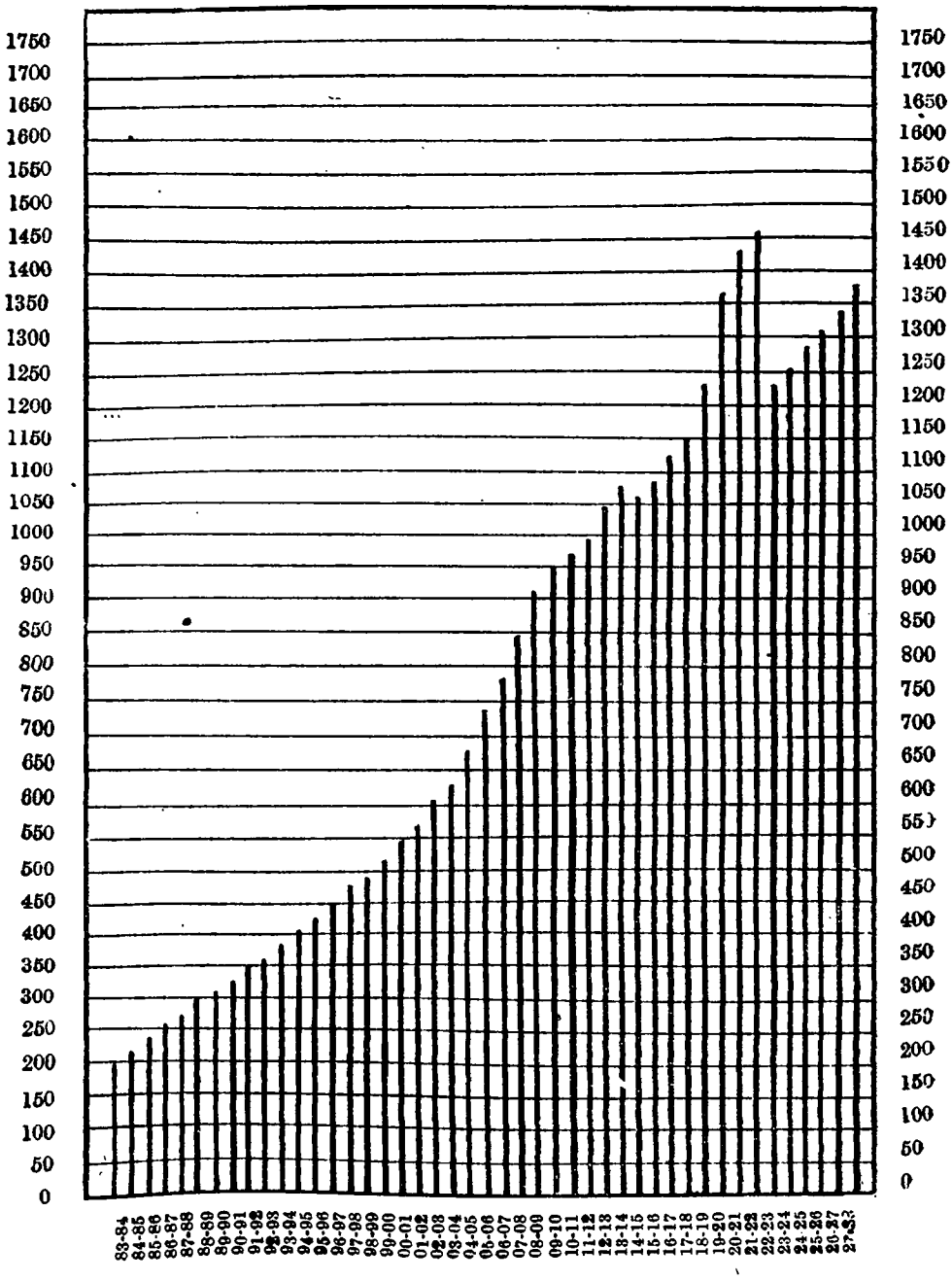
The daily letter telegram service which has hitherto been confined to the British possessions and United States of America was extended during the year under review to Belgium, Czechoslovakia, Denmark, Germany, Norway, Luxemburg and Sweden. A week-end letter telegram service was also introduced between India and Czechoslovakia, Denmark, Holland and Sweden.

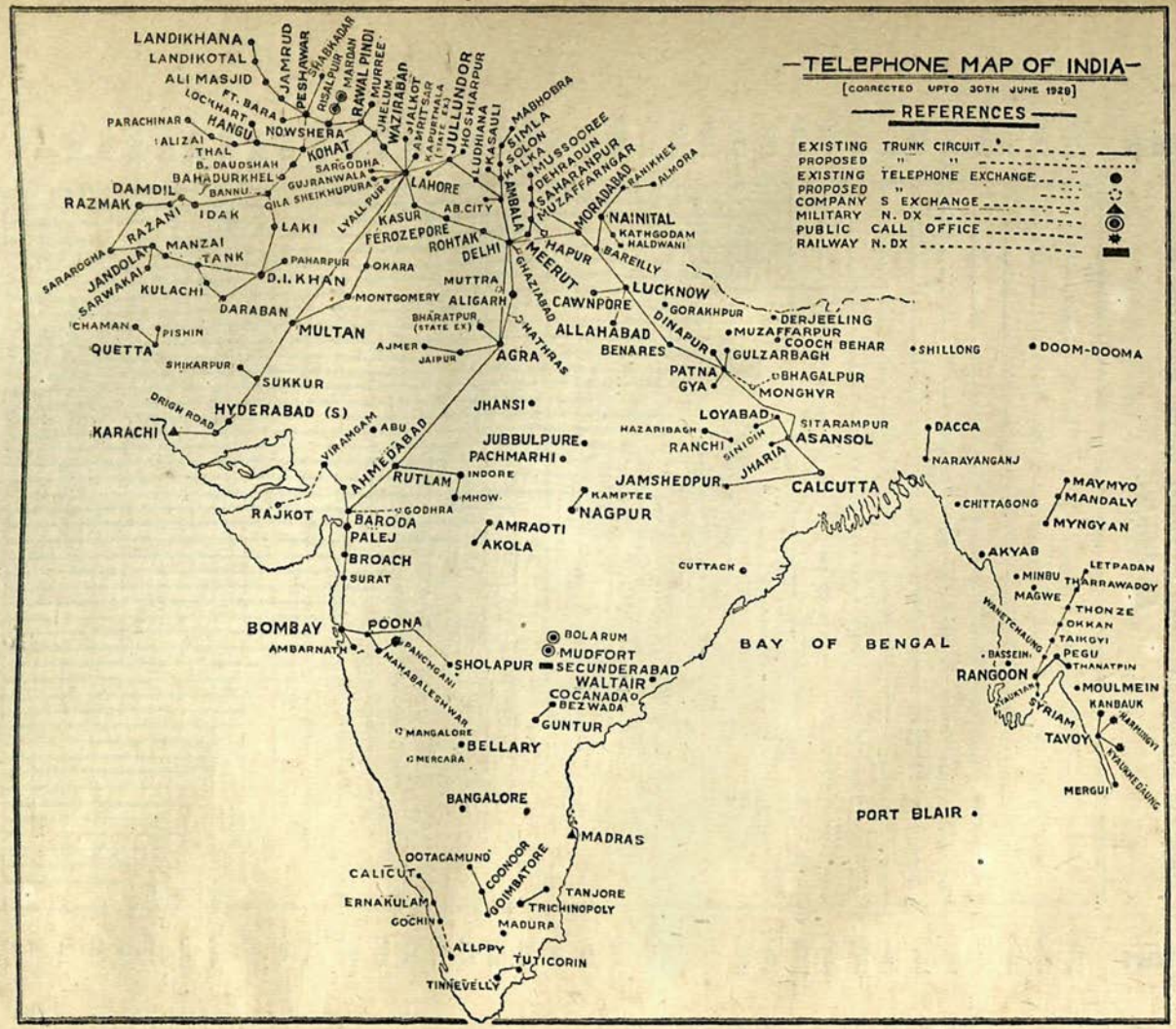
There were, at the end of the year 1927-28, 99,978 miles of aerial line carrying 452,764 miles of wire and 1,039 miles of cables with 80,095 miles of conductors.

As most people are perhaps aware, the system of telegraphy universally adopted for the main lines in India is the Baudot Printing Telegraph. This system has its merits and its defects,

DIAGRAM.

Diagram showing Growth of Postal Traffic since 1883-84—All Articles.




TELEPHONE MAP OF INDIA
[CORRECTED UPTO 30TH JUNE 1928]
REFERENCES
EXISTING TRUNK CIRCUIT
PROPOSED " "
EXISTING TELEPHONE EXCHANGE
PROPOSED "
COMPANY'S EXCHANGE
MILITARY N. DX
PUBLIC CALL OFFICE
RAILWAY N. DX
LANDIKHANA
LANDIKOTAL
ALI MASJID
JAMRUD
PESHAWAR
SHABKADAR
ROSALPUR
HARIPUR
HARIPUR
RAWAL PINDI
JHELUM
WAZIRABAD
JULLUNDOR
LUDHIANA
HOSHIARPUR
KASAULI
MABHOBRA
SIMLA
SOLON
KALKA
MUSSOOREE
DEHRADUN
SAHARANPUR
MUZAFFARNGAR
MORADABAD
RANIKHET
ALMORA
NAINITAL
KATHGODAM
HALDWANI
BAREILLY
LUCKNOW
GORAKHPUR
DERJEELING
MUZAFFARPUR
COOCH BEHAR
SHILLONG
DOOM-DOOMA
GULZARBAGH
BHAGALPUR
MONGHYR
PATNA
GYA
LOYABAD
SITARAMPUR
ASANSOL
HAZARIBAGH
RANCHI
SINDRI
JHARIA
DACCA
NARAYANGANJ
CALCUTTA
JAMSHEDPUR
CHITTAGONG
MAYMYO
MANDALY
MYNGYAN
AKYAB
MINBU
LETPADAN
THARRAWADDY
MAGWE
THONZE
OKKAN
TAIKGYI
PEGU
BASSEIN
THANATPIN
RANGOON
MOULMEIN
KANBAUK
MERGUI
PORT BLAIR
BAY OF BENGAL
CUTTACK
KAMPTEE
NAGPUR
AMRAOTI
AKOLA
JUBBULPORE
PACHMARHI
JHANSI
AGRA
ALLAHABAD
CAWNPORE
MEERUT
DELHI
ROHTAK
FEROZEPORE
LAHORE
AMBALA
GHAZIABAD
HATHRAS
MUTTRA
ALIGARH
BHARATPUR
AJMER
JAIPUR
MULTAN
MONTGOMERY
LYALLPUR
KASUR
AB.CITY
OKARA
PAHARPUR
D.I.KHAN
TANK
MANZAI
SARWAKAI
JANDOLA
RAZANI
IDAK
LAKI
DAMDIL
BAHADURKHEL
BANNU
GUJRANWALA
SARGODHA
B. DAUDSHAH
KOHAT
THAL
HANGU
NOWSHERA
PARACHINAR
ALIZAI
LOCKHART
FT. BARA
RAZMAK
SARAROGHA
KULACHI
DARABAN
CHAMAN
PISHIN
QUETTA
SHIKARPUR
SUKKUR
HYDERABAD (S)
DRIGH ROAD
KARACHI
VIRAMGAM
ABU
AHMEDABAD
RUTLAM
INDORE
MHOW
GODHRA
RAJKOT
BARODA
PALEJ
BROACH
SURAT
BOMBAY
AMBARNATH
POONA
PANCHGANI
MAHABALESHWAR
SHOLAPUR
BOLARUM
MUDFORT
SECUNDERABAD
WALTAIR
COCANADA
BEZWADA
GUNTUR
MANGALORE
MERCARA
BELLARY
BANGALORE
MADRAS
OOTACAMUND
COONOOR
CALICUT
COIMBATORE
TANJORE
TRICHINOPOLY
ERNAKULAM
COCHIN
MADURA
ALLPPY
TUTICORIN
TINNEVELLY

but during the year it worked well, though it was subject to occasional stoppages when the lines were being overhauled or were interrupted. It may be mentioned that between Rangoon and Madras, the Wheatstone system was worked during the year by wireless.

There has been a steady expansion of the telephone system in the country. On the 31st March, 1927, there were 271 exchanges with 17,115 connections, while on the 31st March, 1928, there were 280 exchanges with 20,042 connections. During the year ending 31st March, 1927, Rs. 33,15,261 were collected for the hire of telephone connections and Rs. 7,68,573 for trunk call fees. During the year ending 31st March, 1928, these figures went up to Rs. 34,06,271 and Rs. 10,50,771 respectively.

On 31st March, 1927, there were 18 licensed telephone exchanges with 28,384 connections. The number of connections in these exchanges increased to 30,598 on 31st March, 1928. The revenue derived from Royalties increased from Rs. 3,09,434 in 1926-27 to Rs. 3,36,791 in 1927-28. Increased Trunk Telephone facilities continued to be given, and nine additional Trunk Circuits were opened during 1927-28, in addition to fourteen other trunk circuits being taken over from the Army Department.

The actual gross receipts of the Indian Posts and Telegraphs Department during the year 1927-28 amount to Rs. 10·83 crores, which is higher by 30 lakhs than the actual gross receipts of 1926-27. The actual working expenses for 1927-28 were Rs. 1,054 crores, which is higher than the actual working expenses of 1926-27 by 63 lakhs. Taking into account the interest charges which the Department has to pay for its capital assets, the actual receipts indicate that there has been a loss of Rs. 26·15 lakhs on the working of the Department for the year 1927-28, as compared with a net profit of Rs. 1,025 lakhs in 1926-27.

During 1928 the work of re-constructing certain departmental wireless stations was continued. Progress was made with the direction-finding installation for the new coast station at Santa Cruz (near Bombay). Modern continuous-wave transmitting sets were installed in place of the obsolete "spark" sets at Nagpur and Mhow. New transmitting sets were obtained for Calcutta and Secunderabad, and a special short-wave installation for Karachi in connection with the Civil air service.

The Wheatstone system, which had been applied experimentally to the Madras-Rangoon duplex wireless circuit from November, 1927, was continued during the year with very satisfactory results, proving that system when efficiently organised to be decidedly superior to the Baudot system for a wireless circuit which has to contend with atmospheric interference. Such results, however, were only obtained after careful organisation on modern lines together with adequate training and supervision of the staff.

During December, 1928, and subsequently the wireless station at Peshawar played an important part in maintaining communications with Kabul when the telegraph lines were interrupted owing to disturbances in Afghanistan. The station at Karachi also afforded valuable wireless facilities to R. A. F. aeroplanes *en route* to and from Afghanistan.

The "Beam" wireless stations of the Indian Radio Telegraph Company, which work under a license and maintain direct communication with British Government stations in England, continued to work satisfactorily. The volume of traffic to and from Europe, America and Africa carried by this service steadily increased during the year.

The broadcasting stations of the Indian Broadcasting Company at Bombay and Calcutta, which were opened in 1927, continued in operation. Owing to financial difficulties, however, the company found it necessary to modify their programmes to some extent. Although broadcasting has become popular in some parts of India the increase in the number of licenses for broadcast receiving sets has not been so large as was expected. In Rangoon the Burma Radio Syndicate installed a small broadcasting station and was licensed to carry on an experimental broadcasting service.

Experimental work was carried out in connection with transmission and reception on short waves, which will be of increasing importance in the future development of wireless communication, especially over long distances. Future arrangements in this connection are receiving careful consideration.

The revised estimate of gross receipts of the Indian Posts and Telegraphs Department during the year 1928-29 amounts to Rs. 11·23 crores, which is higher by 40·76 lakhs than the actual gross receipts for 1927-28. The revised estimate of working expenses for 1928-29 is 10·89 crores, which is higher than the actual

working expenses of 1927-28 by 25·61 lakhs. Taking into account the interest charges which the Department has to pay for its capital assets, the revised estimate indicates that there will be a net loss of 28·57 lakhs on the working of the Department for the year 1928-29 as compared with a net loss of 26·15 lakhs in 1927-28.

* * *

Since the publication of our last report Karachi has been brought into direct communication by air with London, and a new era in the history of Empire communications may be said to have begun on 30th March, 1929, when Messrs. Imperial Airways' air liner "City of Glasgow" left Croydon on the first stage of its 5,000 miles flight to Karachi. The air liner arrived in Karachi on 6th April, thus inaugurating the first weekly air mail service between London and Karachi, bringing India within seven days reach of England. This service was inaugurated as the result of an agreement entered into by the British Government with Messrs. Imperial Airways, Ltd., for the operation of a weekly aeroplane mail service between London and India. The necessary facilities for this service have been provided at Karachi, which will serve as a terminal for the air service in India until such time as the service can be extended to Delhi, Calcutta and other parts of India. With regard to internal air routes in India the Government of India have approved of the principal of subsidising certain services, and called for tenders for the operation of a subsidised aeroplane service between Karachi and Delhi with an eventual extension to Calcutta. The main conditions specified for the grant of the subsidy were that the company should be an Indian Company with rupee capital and with a majority of Indian Directors, and that the majority of the share capital should be held by Indians. The company will be required to employ Indian personnel in all non-technical branches, and to afford an opportunity for their employment in the technical branches as soon as the supply of fully-trained Indian personnel is available. Discussion in the Standing Finance Committee of the Legislative Assembly, after the receipt of the tenders, indicated a desire on the part of the Legislature that more effective measures should be adopted to ensure that the control of any such subsidised company should be and remain predominantly Indian, and methods to secure this object were devised under which the Government of India will hold a part of the capital with a preponderating vote in the company, at least three-fifths of the

Directors of which will be Indians, and the appointment of all Directors will be subject to the approval of the Government of India. The Government of India have also approved of a scheme for improvements to the Civil Aerodrome at Dum Dum (Calcutta), one of the most important aerodromes in India, in order to render it serviceable at all seasons of the year. The cost of this scheme will be Rs. 2,93,500, and considerable progress has already been made with the work. A new Civil Aerodrome has also been established at Gaya (in Bihar and Orissa).

* * *

With the object of popularising civil flying in India and of affording facilities for the training of Indians as air pilots the Government of India sanctioned, in 1927, a scheme for the grant of financial assistance to four light aeroplane Clubs in India. The scheme involves an expenditure of over $3\frac{1}{4}$ lakhs of rupees. Four Clubs which were approved for Government assistance have now been established at Karachi, Delhi, Calcutta and Bombay, and under the terms of the scheme each Club has been provided with two " Moth " aeroplanes, with one spare engine. Each Club will receive an annual grant of Rs. 20,000 in addition to an initial grant of Rs. 9,000 towards the provision of a hangar, and a bonus of Rs. 150 per pilot trained by the Clubs, limited to Rs. 2,250 per club, during the first year of its operation. All the clubs have begun operations enthusiastically, and the Pilot Instructors and Ground Engineers have been appointed. The Bombay Flying Club held its inaugural meeting on the 13th January, 1929, and the Delhi Flying Club was opened by His Excellency the Viceroy on the 28th January. The Governor of Bengal opened the Bengal Flying Club at Calcutta on the 2nd February, and the Judicial Commissioner of Sind declared the Karachi Aero Club open on the 10th February. The Government of India have also granted a subsidy to the extent of Rs. 30,000 to the Aero Club of India and Burma, which was formed in 1927. This body acts as a co-ordinating agency between the Government of India and the Light Aeroplane Clubs.

* * *

With a view to the training of Indians in Civil Aviation in England and their possible employment by Government in connection with the regulation and control of Civil Aviation in India,

the Government of India sanctioned the award of ten scholarships within a period of four years and involving a total expenditure of Rs. 2,12,000. As mentioned in our last report, one scholar joined the Imperial College of Science and Technology in October, 1927. Of the four scholarships awarded in 1928, two Indian candidates were selected in England by the High Commissioner for India and two in India by the Government of India. These scholars commenced their course of flying training at the De Haviland Aircraft School, Stag Lane, Edgware, on the 1st July, 1928. One scholarship was subsequently terminated as the holder was reported to be unlikely to make an efficient pilot. The appointment of an Aircraft and Engine Inspector was sanctioned on the staff of the Director of Civil Aviation in India during the year, and Mr. A. S. Lane, who was recruited by the High Commissioner for India for the post, assumed charge of his duties in March, 1929, at Karachi.

* * *

The year under review was remarkable for the large number of international flights which passed through India, the total being sixteen. In April, 1928, Flying Officers Vintcent and Newall arrived at Karachi from England in their D.H. 9 aeroplanes. They have remained in India since, having resigned their commissions in the Royal Air Force, and are engaged in commercial aviation with their headquarters in Bombay. In the same month the French pilots Costes and Le Brix arrived in Calcutta after a non-stop flight from Hanoi. They continued their flight from Calcutta on the morning of the 11th, and arrived in Karachi the same evening, establishing a record for the fastest flight across India.

In May, the French Pilot, Captain Pelletier D'Oisy, accompanied by Lieutenant Gonin, Navigator, and M. Carol, Engineer, arrived in Karachi *en route* to Tokio, in a Potex 29 biplane. Their flight across India was uneventful until they reached Akyab, when engine trouble led to a forced descent in which the machine was destroyed and the navigator and engineer seriously injured. Captain D'Oisy luckily escaped injury.

In August the aeroplane "Princess Xenia" (Fokker F. VIF fitted with a Jupiter 400 H.P. engine), piloted by Captain C. D. Barnard and Flying Officer E. H. Elliot, with Her Grace the

Duchess of Bedford as passenger, arrived at Karachi. The machine had originally started from England in June in an attempt to reach India in four days, but engine trouble caused it to be held up at Bushire, which it had reached on the third day of the flight. The return flight met with better success, being accomplished in the record time of 4½ days from Karachi to Croydon. The Duchess of Bedford returned to England by steamer.

In September, a series of five Dutch flights, at intervals of a week, commenced from Amsterdam to Batavia *viâ* India. Mails were carried on each flight, and the machines used were 3-engined Fokkers fitted with Armstrong-Siddeley Lynx engines, and were destined for the Netherlands Indian Air Navigation Company, operating in the Dutch East Indies. The first machine arrived in Karachi on the 18th September and the second on the 25th. Both these machines, as also the fifth which later returned to Amsterdam, are said to have carried sufficient mails to cover the cost of the flight, and reached their destination safely. The third machine sustained slight damage in landing at Cawnpore on 2nd October, and was delayed for some time awaiting the arrival of spares before it could continue its flight. The fourth machine accomplished its journey without mishap as far as Rangoon, but when attempting to take off there its left wheel sank in soft ground and was wrenched off. The flight was consequently abandoned.

Another arrival in Karachi in September was the late Baron von Huenfeld, of trans-Atlantic fame, who was flying to Tokio in his Junker aeroplane "Europa". He reached Calcutta on the 27th and left for Hanoi *en route* to Tokio on the 1st October.

In November Captain Frank Hurley, accompanied by Flying Officer Moir and Mr. Owen, crossed India on their flight from Australia to England. The machine used was a Ryan monoplane fitted with a 220 H.P. Wright Whirl-wind engine and was named the "Spirit of Australia". In the same month two Swiss pilots, Monsieur Oskar Kaser De Horn and Lieutenant Gottlieb Imhof, flying a low-powered Swiss monoplane, arrived at Karachi from Zurich. They eventually flew on to Bombay with the intention of returning by air to Zurich, but had to abandon the return flight owing to engine trouble.

In December, a sixth Dutch mail flight from Amsterdam to Batavia *viâ* India was undertaken successfully. This machine later

in January re-crossed India on a return flight to Amsterdam. In the same month, a German pilot, Baron Koenig, also arrived at Karachi, having flown from Berlin *viâ* Moscow, Teheran and Bushire in a Klemm-Daimler light monoplane fitted with a 20 H.P. engine. Later in the month he flew to Calcutta, which he eventually left in February, 1929, for Bangkok.

In February, 1929, the French pilots Paillard and Le Brix flew across India on their way to Saigon in a Bernard Commercial Aircraft fitted with a 0450 C. V. Renault motor, and carrying mails. The machine unfortunately crashed shortly after leaving Rangoon, Monsieur Le Brix and the mechanic Jousse sustaining injuries. The airmen were rescued by villagers, and the mails and parts of the machine were salvaged. Another arrival at Karachi during this month was Vicomte de Sibour, who, accompanied by his wife, was flying from England to China in a De Havilland "Moth" machine fitted with a 100 H. P. Gipsy engine.

Such is the record of Civil Aviation in India during 1928-29, and now that the long-talked of air mail service between England and India has been established the importance of India as a connecting link between Britain and the outlying parts of the British Empire cannot be overestimated.

Finally, it may be noted that considerable interest is being taken in aviation by many members of the Indian Legislative Assembly, several of whom were passengers in aeroplane flights over Peshawar during a specially arranged visit to the Frontier in April, 1928.

* * *

The Indian Meteorological Department, consequent upon the development of aviation in India, has accomplished a very full programme of work during the period under review. The transfer of the headquarters office from Simla to Poona was completed in June, and the new headquarters building was formally opened by His Excellency Sir Leslie Wilson, Governor of Bombay, on 20th July, 1928, in the presence of the Honourable Mr. A. C. MacWatters, Member in charge of the Department of Industries and Labour, Government of India, and a large and distinguished gathering. In connection with the ceremony, an exhibition of meteorological instruments, weather maps, charts, etc., illustrative of the varied activities of this department was on view, and

the occasion was further utilised for an important conference of departmental officers from all parts of India, in which matter of administrative and scientific interest were discussed. It has since been decided that a similar conference of officers shall be held annually at the new Poona headquarters.

Preparations for the provision of meteorological information along the Basra-Karachi air route were continued during the year. The Meteorologist-in-charge at Karachi, who had been sent on deputation to Europe to study recent developments in aeronautical meteorology, visited the meteorological services in England, Norway, Germany, Belgium, France, Italy and Egypt, and on his return resumed charge of his duties at Karachi in September, 1928. As the airship intended for the London-Karachi air route is nearing completion and trial flights are expected before the end of 1929, proposals were submitted during the year to Government regarding the action to be taken for the intermediate stage of meteorological preparation for the arrival and departure of airships. These contemplate an extension of the present organisation by establishing a few more reporting stations in the neighbourhood of Persia, equipping some of the existing observatories along the flying route with self-recording instruments and obtaining synoptic data from a larger area.

The observatory building at the Karachi Airship Base, which was completed at the end of 1927-28, was equipped with self-recording instruments, and the recording of ground and upper air observations, including visual observations of the hourly values of cloud and visibility, was inaugurated at the observatory. At the forecasting centre at Karachi, in addition to the study of daily synoptic charts for weather reports and forecasts, a beginning was made with the study of weather conditions based on data extending up to Italy to the west and Russia to the north, with a view to finding out the possibility of issuing more detailed forecasts, as well as medium-range forecasts extending up to 3 or 4 days or more.

In connection with the Karachi-Delhi and Delhi-Calcutta sections of the proposed trans-India air service, a scheme for the provision of meteorological facilities has been submitted to the Government of India for sanction. The scheme comprises the location of an office at Delhi in charge of a Meteorologist and the fitting up of complete sets of meteorological self-recording instruments at

six aerodromes along the route, besides other details of a minor character.

* * *

For some years past the International Meteorological Committee, which is the permanent executive body of the International Meteorological Organisation, has been contemplating the establishment of an International Meteorological Secretariat. This Committee decided to form a small secretariat and place it temporarily at De Bilt or Utrecht, in Holland. In order to meet the cost of this office the various countries interested in the work of the organisation were asked to contribute towards its maintenance according to the scale based on the size of the country. As the maintenance of the International Meteorological Organisation was considered essential for meteorological progress and India has gained appreciably by such international co-operation in the past and would gain still more in the future, the Government of India sanctioned the payment of 4,000 francs annually as India's contribution to the International Meteorological Secretariat.

* * *

During the year eleven pilot balloon stations were opened in different parts of India in accordance with the general upper air extension scheme, and three more in north-east India in connection with the intensive study of weather, and especially for nor'westers there. In addition to the recording of wind speed and direction in the upper atmosphere by pilot balloon ascents, other useful measurements of pressure, temperature and humidity at higher levels by means of sounding balloons, etc., were undertaken by the department. Arrangements were made for the recovery of sounding balloon meteorographs through the Mamlatdars. Up to the end of December, 1929, eighteen instruments were sent up and six were received back. The first of the six instruments that were returned had reached a maximum height of 12 miles. The base of the stratosphere was seen from the record to be at a height of about 10 miles and the temperature recorded there,—119° F., or 151° F. below the freezing point,—is one of the lowest temperatures that have been recorded so far in any part of the world. In the stratosphere, about the height of 10 miles, the temperature increased again to 87° at the top of ascent. R. A. F. flying machines continued their meteorological observations at Peshawar, Risalpur,

Kohat and Karachi, and made further upper air data available to this department.

Considerable attention was paid during the year towards researches in both theoretical and practical meteorology and allied subjects. The application of modern theories of meteorology to the study of Indian Weather Charts was continued, and proved to be of great help in forecasting. A further study of microseisms at Bombay appeared to reveal the existence of three distinct types of these vibrations which are readily distinguishable from one another and are associated respectively with (1) South-west Monsoon; (2) Storms in the Arabian Sea and the Bay of Bengal; and (3) local disturbances on the Bombay coast. Interesting experiments on earth-current measurements similar to those which yielded interesting results at the Bombay Observatory were started in Poona. At Kodaikanal, spectrograms for the determination of the amount of ozone in the upper air were obtained on all suitable days from the 12th September, 1928, onwards, with a Dobson's spectrograph which has been loaned to the Observatory. Investigations of the upper air by means of instruments designed or improved upon by the Agra Observatory in recent years furnished interesting data which have been, or will shortly be, published in the form of Scientific Notes. A number of statistical investigations were taken up by officers and assistants of the department, and also by science graduates who worked for short periods as unpaid research scholars in the Poona Office.

At Calcutta the details of the scheme for the intensive study of weather over north-east India were worked out during the year. Arrangements have been completed for three sets of observations per day at 21 existing meteorological stations, and for reports of non-instrumental observations from 56 auxiliary stations distributed over the area. The equipment of some of the selected stations with autographic instruments is in hand, and is expected to be completed very soon.

The storm and heavy rainfall warnings were issued from Poona and Calcutta. During the year seven storms of slight to moderate intensity formed in the Bay of Bengal, and timely warnings were issued in each case. Warnings were also issued on 27 occasions to the Arabian Sea area from Poona and on 21 occasions to the Bay of Bengal area from Calcutta in connection with depressions,

squally weather or winter disturbances. Heavy rainfall warnings were issued by special telegrams to the officials on the warning list of this Department, and were also included at the end of the Daily Weather Telegram.

An increasing number of weather reports and forecasts were supplied during the year from Poona, Karachi, Quetta and Peshawar in connection with aviation. Among the noteworthy flights for which forecasts were issued during the year may be mentioned the visit to India of the Under Secretary of State for Air, Sir Philip Sassoon, on the flying boat "Iris", and the inauguration of the Dutch Royal Air Mail Service to the East Indies.

* * *

Towards the close of the year under review it was notified that the Indian Merchant Shipping (Amendment) Act, 1928, which transferred to the Governor-General-in-Council the statutory powers hitherto vested in the local Governments in regard to the administration of the Central subject of shipping and navigation, would come into force from the 1st April, 1929. Under the new centralisation scheme the coasts of India will be divided into six Districts based on the major ports of Aden, Karachi, Bombay, Madras, Calcutta and Rangoon. Then each District, with the probable exception of Karachi, will be placed in charge of an officer to be called the Principal Officer, Mercantile Marine Department, in that District. The Principal Officer will be the chief executive officer of the Government of India in his district in all matters relating to the Mercantile Marine administration, and will correspond with the Government of India direct and not through the local Government. Chittagong will be a sub-District, and be in charge of a Nautical Surveyor. The scheme also includes the appointment of a technical advisory staff for the Commerce Department of the Government of India, and the services of two officers have been obtained on loan from the Board of Trade for appointment as Nautical Adviser to the Government of India and as Chief Surveyor with the Government of India.

* * *

In last year's report mention was made of the investigation by two officers of the question connected with the conditions prevailing on native passenger ships in the light of the criticisms received

on the draft rules published by the Government of India in 1925. The officers, after visiting the principal ports and examining these questions in consultation with the local authorities, submitted their report in May, 1925, together with a revised set of draft rules. The revised draft rules were again published for criticisms in October, 1928, and at the close of the year criticisms had been received and were under the consideration of the Government of India.

* * *

The Indian Lighthouse Act of 1927, referred to in last year's report, was brought into force on April 1st, 1929, it being found impossible to do so earlier as the Government of India desired first to set up the necessary machinery to enable them properly to discharge the statutory powers vested in them by the new Act.

The lighthouses on the coast of India have been divided into two classes, *viz.*, local and general. The local lighthouses are those which are of assistance only to navigation entering or leaving a particular port. The general lighthouses are those which are of assistance to navigation generally. The local lighthouses will be administered by the Port Trusts concerned or by the local Governments where there are no Port Trusts, and the general lighthouses by the Government of India. For purposes of the administration of the general lighthouses the coasts of India have been divided into six districts based on the major ports of Aden, Karachi, Bombay, Madras, Calcutta and Rangoon, and each district has been placed in charge of a Superintendent of Lighthouses, who will be the chief executive officer of the Government of India in his District in all matters relating to general lighthouses and will correspond with the Government of India direct and not through the local Government. A Chief Inspector of Lighthouses has been appointed and two Inspectors of Lighthouses will be appointed shortly. These officers will be attached to the Commerce Department of the Government of India. The Government of India will be aided in the administration of the general lighthouses by a Central Advisory Committee consisting of members representing the interests concerned.

CHAPTER VI.

Trade and Commerce.

The changed relations between India and Great Britain consequent upon the introduction of the Reformed constitution in 1920 resulted in India exercising a greater control over her own Fiscal Policy than before. The Indian Fiscal Commission, a representative body of European and Indian commercial interests, was appointed in 1921 to examine the Government of India's tariff policy. The Commission recommended the adoption of a policy of protection, to be applied with discrimination along certain carefully indicated lines, and also the creation of a Tariff Board to investigate the claims of particular industries to protection and to advise the Government and the Legislature in carrying out the Fiscal Commission's policy. The Tariff Board came into existence in 1923 as an experimental measure for one year, but the numerous applications for protection from various industries made it desirable that its life should be extended from time to time, and so to-day the Indian Tariff Board still functions.

During the year under review the Tariff Board concluded their investigations into the claims for protection of the Match and Oil industries, and also the enquiries into the question of tariff equality in respect of the manufacture of Electric Wires and Cables and of Printing Type.

In October, 1926, the Tariff Board was directed by the Government of India to investigate the question whether the match industry in India should be protected, and to report whether the existing import duty of Re. 1-8 per gross on matches, which had a protective effect, should be maintained, and also whether the loss of revenue resulting from the high rate of duty could be made up by any other appropriate form of taxation of the industry. The Board found that the match industry fulfilled all the three conditions laid down in paragraph 97 of the Indian Fiscal Commission Report, and that it should be protected. They recommended that the existing revenue duty of Re. 1-8 per gross should be maintained and converted into a protective duty. The Government of India accepted this recommendation, and an Act entitled "The Match Industry (Protection) Act, 1928" was passed to give

effect to it. As recommended by the Board no time limit has been fixed for the protective duty. The Government of India, however, do not contemplate the retention of the duty at the high rate of Re. 1-8 per gross for any long period. If in future it became evident that the Swedish Match Company had definitely adopted a policy of supplying the Indian market with matches made in India and if it appeared that the existing prejudice against the Indian match similar in quality to the imported match was disappearing, the amount of duty would be open to reconsideration. The Board considered that the manufacture of matches was not a fit industry for development on cottage lines, and could not therefore recommend any special measures for the encouragement of cottage match factories. The Government of India accepted this finding.

As regards the possibility of making up the loss of customs revenue the Board, while recognising that in certain circumstances an excise duty might properly be imposed, made no specific recommendation. The Government of India agreed with the Board that conditions might arise rendering the imposition of such a duty desirable. They did not, however, propose to impose an excise duty for the present.

The Board also examined the question of the possible danger to the Indian Match Industry arising from the operation of the Swedish Match Company behind the tariff wall. They were of the opinion that in existing circumstances no action was called for against the Swedish Match Company on the ground of unfair competition. They recommended, however, that, should developments indicate that the Company was acquiring undue control to the detriment of the Indian industry, Government should take steps to safeguard this industry. The Government of India considered that if it appeared probable that the Swedish Match Company would obtain a monopoly of the manufacture and sale of matches in India, this would create a new situation which would necessitate a re-examination of the position.

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Reference was made in the last year's report to the enquiry by the Tariff Board into the question of safeguarding the Indian Oil Industry against injury inflicted on them by a kerosene price war in progress in India between the Standard Oil Company of New York and the Royal Dutch Shell Group. The Board was of the

opinion that no case had been made out for safeguarding the Indian Oil Industry against the sale of imported kerosene below world parity. The Government of India saw no reason for rejecting this opinion, and accepted the finding of the Board that no action was called for.

The questions of protection for Electric Wires and Cables and Printing Type were referred to the Board in March, 1925, along with several others of a similar nature in which representations were made that the development of certain industries was hampered by the fact that the duty on the finished article was lower than the duty on the materials which have to be imported for the manufacture of that article. The Board recommended that a duty of 5 per cent. *ad valorem* should be imposed on all classes of rubber-insulated wires and cables other than those specified in item 90-A of the Import Tariff Schedule, and that the import duty on printing type should be changed from $2\frac{1}{2}$ per cent. *ad valorem* to a specific duty of one anna per lb. The Government of India accepted these recommendations and gave effect to them in the Indian Tariff (Amendment) Act of 1929.

The Board also recommended the removal of the duty of 15 per cent. *ad valorem* on electrolytic copper rod, commonly known as " black rod ", which is used for the manufacture of bare hard-drawn copper conductors. The Government of India found, however, that there are practical difficulties in distinguishing electrolytic copper rod from other copper rod, and the relation of prices was such that in the event of the former being brought on to the free list users of good quality copper for other purposes would be led to use electrolytic copper. It was accordingly decided that the relief required by the manufacturers (the Indian Cable Company) should be given not by removal of the duty, but by allowing them under executive orders, as had hitherto been done as a temporary arrangement, to import their requirements of such rods free of duty.

* * *

As foreshadowed in last year's report, a second conference on the abolition of Import and Export Prohibitions and Restrictions was held at Geneva in July, 1928. This conference, at which India was represented by Mr. H. A. F. Lindsay, the Indian Trade Commissioner in London, drew up a Supplementary Agreement providing for the conditions required for the coming into force of

the Convention adopted at the first conference, and fixing September 30th, 1929, as the last date on which the ratifications must be deposited. The agreement has been signed by India and 28 other States. The question of ratifying the Convention is now under the consideration of the Government of India.

* * *

An International Conference relating to Economic Statistics was held in Geneva from 26th November to 14th December, 1928. Forty-two countries accepted the invitation of the League of Nations to send delegates, and of these 16 represented Non-European countries. The object of the conference was to draw up an International Convention with reference to the scope of the economic statistics which it is thought should be published officially in each country, and the methods that should be applied in the compilation of certain branches of those statistics. For this purpose the Economic Committee of the League had already framed a draft Convention on the subject, and this was submitted to the conference for consideration. India was represented at the conference by Dr. D. B. Meek, Director General of Commercial Intelligence and Statistics. In accordance, however, with the instructions given him, he refrained from voting and from signing the Convention.

* * *

During the year under review, India participated in a number of fairs and exhibitions in the United Kingdom and on the Continent. The more important of these were the Cardiff Empire Exhibition, October-November, 1928, the Lyon's International Fair, March, 1928, and the Budapest International Fair, April-May, 1928. The Government of India also sanctioned participation by the High Commissioner for India in the Canadian National Exhibition, which was held at Toronto during August-September, 1928.

In the case of the Cardiff Empire Exhibition, India's participation resulted in 39 trade enquiries respecting Indian condiments, canned fruit, rice, coir, tobaccos and cigars. By the visits of large parties from neighbouring schools, thousands of school children were enlightened as to the great part which India plays as a food-producing country. The Lyon's International Fair resulted in 71 trade enquiries, 14 per cent. of which came from other foreign countries. There were over three thousand exhibitors, and the daily number of visitors ran into five figures, so that here again

India benefited to an extent that it is impossible to estimate accurately on paper. At the Budapest International Fair, India had a separate building enclosing thirteen stalls. There were 105 business enquiries, many of which have resulted in substantial orders for India from Hungarian firms. Similar successful results were obtained at the Canadian National Exhibition. The participation of India in overseas Fairs and Exhibitions has proved a healthy stimulant to trade in this country, and money spent in this direction can by no means be considered ill-used.

* * *

On the 20th December, 1928, a treaty was concluded and notes were exchanged between His Majesty's Government and the National Government of China by which:—

(1) Great Britain and other parts of the Empire conceded to China complete tariff autonomy and also the right to impose tonnage dues at such rates as she may think fit.

(2) Great Britain and China undertook to accord most-favoured-nation treatment to each other in respect of import and export duties, internal taxation and transit dues on goods imported or exported by them and all matters connected therewith; and China also undertook to accord similar treatment to other parts of the Empire, including India, on condition of reciprocity.

(3) China undertook to adopt a certain customs tariff which had been provisionally agreed upon at a Conference held in 1926, and to maintain it for at least one year as the maximum tariff applicable to British goods.

(4) China undertook to abolish, as soon as possible, li-kin and other internal taxes on imported goods.

(5) China undertook to apply the new tariff uniformly on all land and sea frontiers, and to abolish the preferential rates hitherto levied on goods imported or exported by land frontier.

The treaty and the new tariff came into force on the 1st of February, 1929.

In pursuance of the undertaking to apply the new Chinese tariff uniformly on all frontiers, China is now levying full duties on the

Sino-Burmese frontier. The land trade between Burma and China has hitherto been the subject of a special arrangement under which China undertook to grant certain rebates of the duties levied by her and India undertook to impose no duties except on salt imported from China and rice exported from Burma. This arrangement has now been abolished by mutual consent.

* * *

The way is now clear for a study of the main features of India's trade during the year 1927-28, the latest year for which statistics are available. The balance of trade in merchandise in favour of India amounted to Rs. 82 crores, as compared with Rs. 79 crores in the preceding year and the exceptionally high figure of Rs. 161 crores in 1925-26. India's net imports of the precious metals further declined during the year under review to Rs. 32 crores as compared with Rs. 39 crores in the previous year and Rs. 52 crores in 1925-26. The net imports of gold also declined to Rs. 18 crores compared with Rs. 19 $\frac{2}{5}$ crores during 1926-27, and the net imports of silver decreased from 19$\frac{3}{4}$ crores in 1926-27 to Rs. 13$\frac{3}{4}$ crores in the year under review. It may be mentioned, however, that despite a number of disturbing factors in China and elsewhere the price of silver during the year remained comparatively stable.

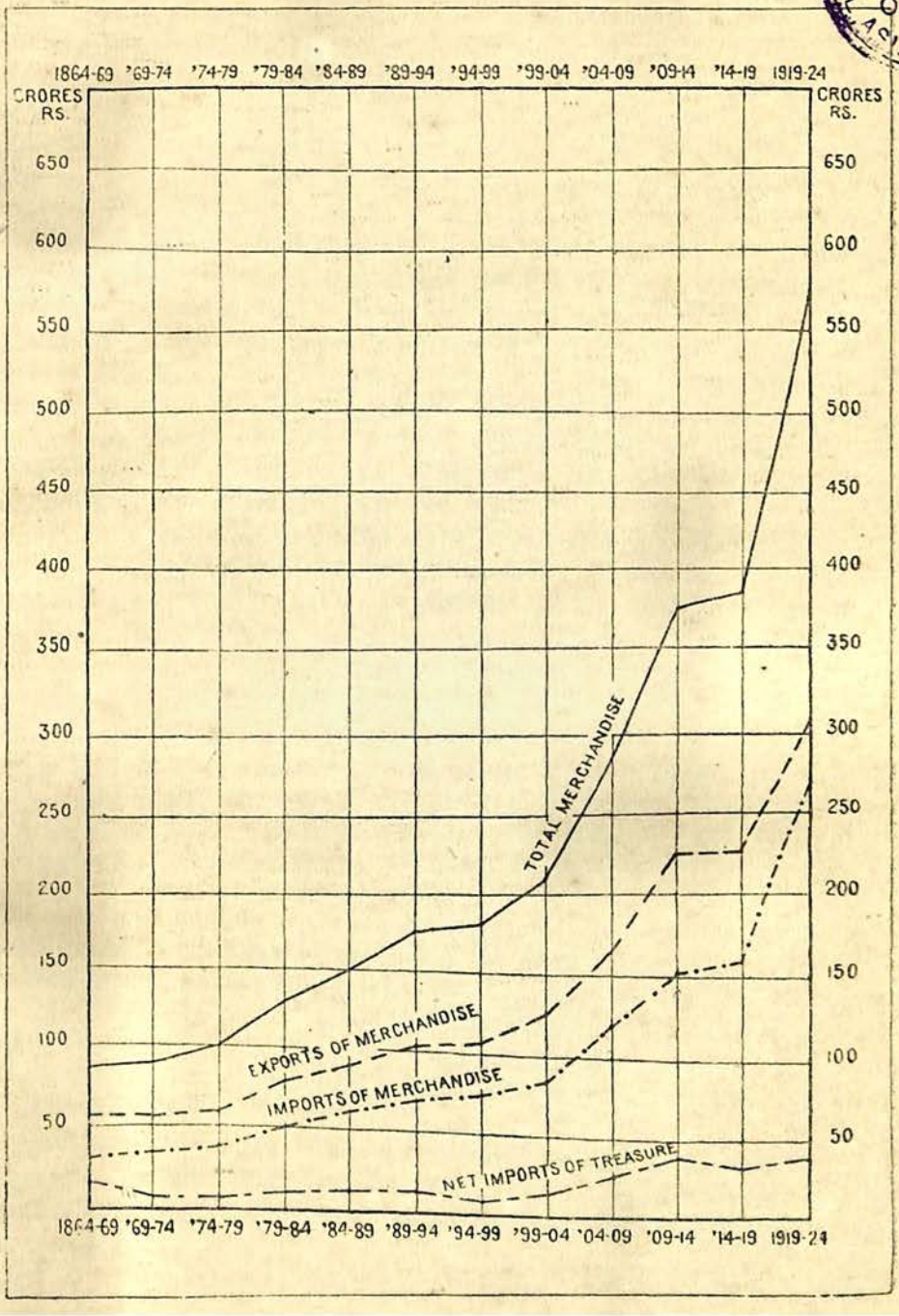
The salient features of Indian imports and exports during the year 1927-28 show that the imports of cotton piecegoods increased by 185 million yards or 10 per cent. in quantity to 1,973 million yards, while the corresponding gain in value was only Rs. 12 lakhs, not even 1 per cent. of the total value of Rs. 55 crores. Grey goods advanced from 748 million yards valued at Rs. 19$\frac{2}{3}$ crores to 875 million yards valued at Rs. 21$\frac{1}{4}$ crores, but the increase was off-set by a decrease under white goods, which fell from 571 million yards valued at Rs. 17$\frac{1}{2}$ crores to 556 million yards valued at Rs. 15$\frac{1}{2}$ crores. The value of coloured goods remained fairly steady at Rs. 17$\frac{1}{2}$ crores, though the quantity imported rose from 447 million yards to 505 million yards. Imports of cotton twist and yarn increased from 49 million pounds to 52 million pounds, but the value recorded showed very little improvement compared with the preceding year. There was a decrease from 923,000 tons to 823,000 tons in the quantity of sugar imported owing to reduced imports of Continental beet sugar, while the fall in prices reduced the value to Rs. 15 crores or by 21 per cent. In iron and steel imports there was an increase of 41 per cent. in quantity and 28 per cent. in

DIAGRAM.

The Foreign Sea-borne Trade of British India during the last 60 years (1864-69 to 1919-24). Quinquennial Average.

(Private and Government)

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY



value from Rs. 16¾ crores to nearly Rs. 21½ crores. Machinery and mill work advanced by Rs. 2 crores to Rs. 16 crores, railway plant and rolling stock by Rs. 1½ crores to Rs. 4¾ crores, and motor vehicles by Rs. 1 crore to Rs. 5 crores. Imports of hardware were valued at Rs. 5¼ crores as against Rs. 5 crores in the preceding year. Mineral oils showed an increase of 49 million gallons in quantity and Rs. 1½ crores in value, this being due to larger arrivals of kerosene oil from Russia and Georgia, and of fuel oils from Persia. The value of imported provisions was Rs. 6½ crores compared with Rs. 5¾ crores in the previous year. Imports of foreign cotton continued on a larger scale during the year under review and amounted to 66,000 tons valued at Rs. 6¾ crores, compared with 46,000 tons valued at Rs. 5 crores in 1926-27. The value of liquors and paper remained almost stationary at Rs. 3½ crores and Rs. 3 crores, respectively. The value of silk and silk manufactures and also of wool and woollens increased during the year from Rs. 4½ crores each to Rs. 5 and Rs. 5⅓ crores, respectively. The imports of artificial silk were valued at Rs. 5½ crores—an increase of Rs. 1¼ crores compared with the preceding year.

On the export side the total value of raw and manufactured jute exported increased from Rs. 80 crores to Rs. 84 crores. Raw jute increased by 184,000 tons or 26 per cent. in quantity to the record figure of 892,000 tons, while the value improved by Rs. 4 crores or 15 per cent. to Rs. 30⅔ crores. Shipments of gunny bags also increased in number from 449 to 463 millions, but there was a fall in the value realised from Rs. 24⅓ crores to Rs. 23¼ crores. Raw and manufactured cotton decreased by Rs. 13 crores or 19 per cent. to Rs. 57 crores, raw cotton alone accounting for a decrease of Rs. 11 crores. There was an increase of 6 per cent. in shipments of rice amounting to 2,152,000 tons valued at Rs. 33⅔ crores. Exports of wheat rose from 176,000 tons valued at Rs. 2¾ crores to 300,000 tons valued at Rs. 4½ crores. All other food grains and pulses showed increases during the year. The value of shipments of oil seeds advanced by Rs. 7½ crores to Rs. 26½ crores, while the quantity of lac exported decreased by 8 per cent. from 592,000 cwts. to 544,000 cwts., but higher prices accounted for an increased return of Rs. 1½ crores or 28 per cent., the total value realised being Rs. 7 crores.

We may now turn to a more detailed survey of the course of exports and imports during the year 1927-28. On the import side cotton manufactures were as usual the most important item, ac-

counting for 28·77 of the total value of imports into this country. Although the total value of the imports of cotton manufactures during the year under review showed little variation from the preceding year's figures there was a substantial increase in quantities, chiefly on the piecegoods side. In December, 1926, cotton prices reached a bed-rock level, and thereafter a larger volume of orders was booked during the early months of 1927. The advancing level of prices for cotton and cotton manufactures, however, subsequently checked the flow of orders, the prices in the distributing centres being unable to keep pace with the rise in manufacturers' prices. After the steady rise in prices throughout the summer months until September, a gradual fall set in and, at the beginning of November the Yarn Association withdrew its control of production and prices. There followed a revival of business, especially in Calcutta and Karachi. The year 1927-28 was, on the whole, a profitable one for dealers in staple goods, as stocks at the beginning were not heavy at the principal distributing centres, and clearances of the goods received were generally satisfactory.

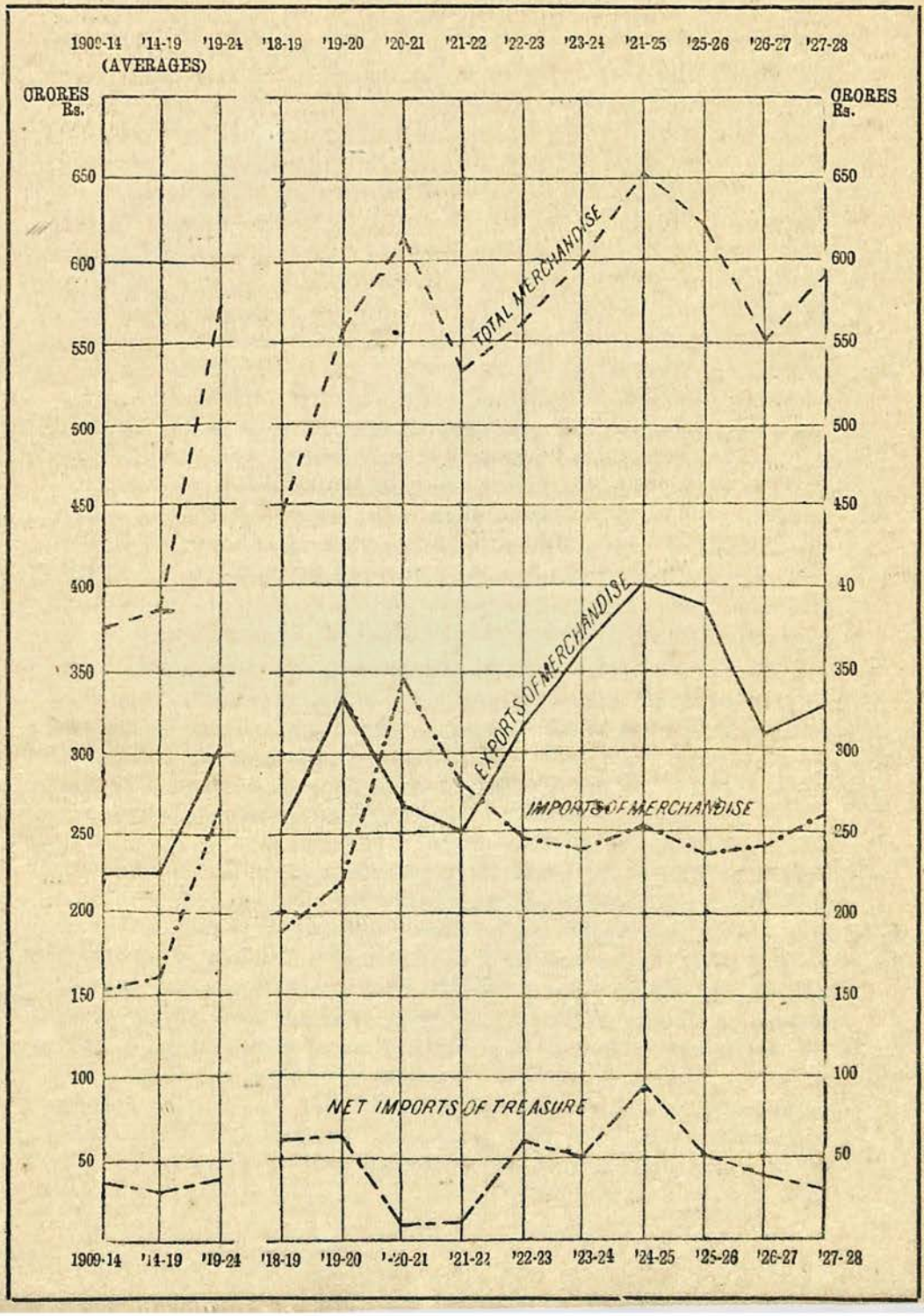
The imports of cotton twist and yarn amounted to 52·3 million pounds against 49·4 million pounds during the previous year—an increase of nearly 3 million pounds in quantity and Rs. 17 lakhs in value. There was a considerable falling off in the imports from Japan during the year owing to the severe depression which the Japanese cotton industry has been passing through since the financial crisis of 1927. Imports from China, on the other hand, showed a remarkable advance, due to lower production costs. It is noteworthy that the Japanese-controlled mills in China, unable to dispose of their goods in the Chinese markets owing to the disturbed political conditions in that country, sent large consignments to the Indian market. The other sources of imports of cotton yarn to India were the Netherlands, Switzerland and Italy. The following figures show India's demand for foreign yarn and the production in Indian mills over a series of years :—

	Imports.	Indian mill production.
	lbs. (1,000)	lbs. (1,000)
Annual average—		
Five years ending 1908-09	38,573	641,776
Five years ending 1913-14 (pre-war period)	41,794	646,757
Five years ending 1918-19 (war period) .	34,063	666,227
Five years ending 1923-24 . . .	44,681	662,512
Year 1913-14 (pre-war)	44,171	682,777

DIAGRAM.

The Foreign Sea-borne Trade of British India during the last ten years as compared with averages of the Pre-war, War and Post-war periods:

(Private and Government)



	Imports. lbs. (1,000)	Indian mill production. lbs. (1,000)
Annual average—*contd.*		
Year 1914-15	42,864	651,985
Year 1915-16	40,427	722,425
Year 1916-17	29,530	681,107
Year 1917-18	19,400	660,576
Year 1918-19	38,095	615,041
Year 1919-20	15,097	635,760
Year 1920-21	47,333	660,003
Year 1921-22	57,125	693,572
Year 1922-23	59,274	705,894
Year 1923-24	44,575	617,329
Year 1924-25	55,907	719,390
Year 1925-26	51,688	686,427
Year 1926-27	49,425	807,116
Year 1927-28	52,345	808,911

From these figures it will be seen that the production of yarns in Indian mills exceeded even the record attained in 1926-27, and amounted to nearly 809 million lbs. From 1927-28 the imports of bleached and mercerised yarn have been classified according to counts in the trade statistics, whereas formerly, the details by counts were only given in respect of grey and coloured yarn. The imports of white yarns in 1927-28, excluding two folds, amounted to 2·4 million lbs., of which 2·3 million lbs. were of counts above 30. The imports of counts 1 to 20, which had declined to 1,068,000 lbs. in 1926-27, increased to 2,465,000 lbs. during the year, in spite of the modification in the rates of import duty at the end of September, 1927. China and the United Kingdom were the chief suppliers, Japan's share dwindling to 153,000 lbs. in the year under review. There was a decline in the production of yarns of counts 1 to 20 in Indian mills by 21 million pounds to 495 million pounds. In counts 21 to 25 the production increased by 14 million pounds to 182 million pounds, while the imports, solely from the United Kingdom, fell from 483,000 pounds to 416,000 pounds. In counts 26 to 30 the production increased by 1 million pounds to 81 million pounds, imports dropping from 470,000 pounds to 439,000 pounds. In counts 31 to 40 the imports were 27·3 million pounds as against 24·4 million pounds (grey and coloured alone) in the preceding year, while the production rose by 6 million pounds to nearly 34 million pounds. Of these imports 1·3 million pounds represented white yarns, the increase under grey and coloured together thus amounting to 1½ million pounds. The United Kingdom's share

in the cotton twist and yarn trade fell from 41 per cent. in 1926-27 to 39 per cent. in the year under review, Japan's share fell from 54 per cent. to 32 per cent., while China's share advanced from 2 per cent. to 25 per cent.

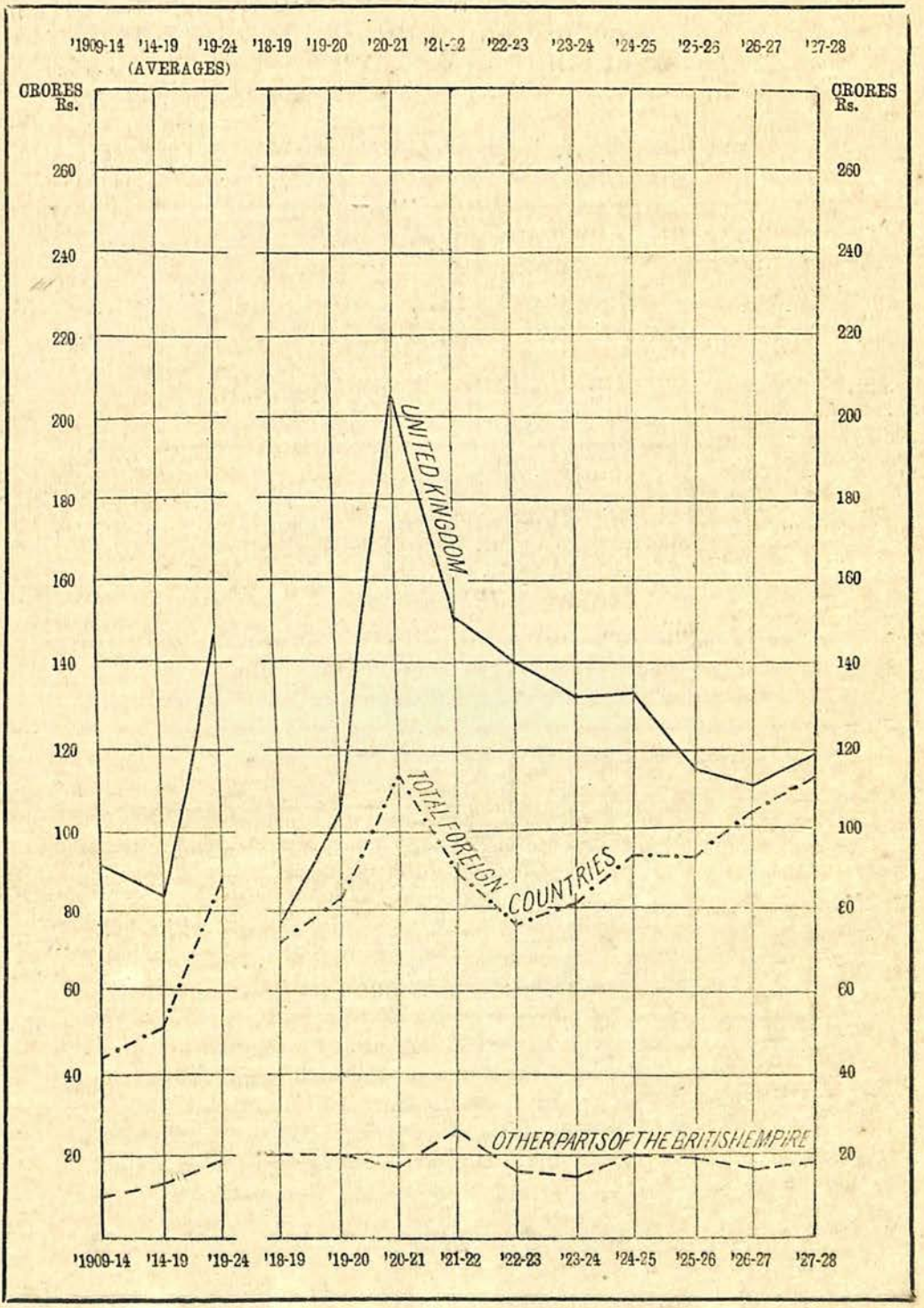
The total imports of piecegoods, including fents, during 1927-28 exceeded the preceding year's receipts by 185 million yards, though in value the increase registered was only Rs. 12 lakhs. Compared with the pre-war year 1913-14, the imports in 1927-28 were less by over 1,200 million yards, but the year's record was the highest since 1916-17. In last year's report it was pointed out that the advance in 1926-27 was chiefly in white goods. In the year under review, the increase was mainly in grey goods, which registered an increase of 127 million yards over the previous year. Coloured, printed or dyed goods increased by 57·4 million yards, but there was a set-back in white goods, which fell by 14½ million yards. The value of grey goods imported increased by Rs. 163 lakhs to Rs. 2,125 lakhs and of coloured goods by Rs. 30 lakhs to Rs. 1,752 lakhs, while white goods fell by Rs. 2,11 lakhs to Rs. 15,42 lakhs. The United Kingdom's share in the imports of grey goods increased by 62 million yards or 11 per cent., and the Japanese share increased by about the same amount. The imports from China (including Hong Kong), advanced from 1·8 million yards to 7 million yards, but the share of the United States of America receded from 2·7 million yards to 2·2 million yards. In white piecegoods the United Kingdom still maintained a monopoly, the figures being 527 million yards as against 550 million yards in the preceding year. Switzerland increased her supply by 3½ million yards to 12 million yards, and Japan from 2·9 million yards to 5·6 million yards. Britain's share in the imports of white piecegoods into India was 95 per cent. against 96 per cent. in 1926-27 and 1925-26.

The United Kingdom was again to the fore in the coloured section of piecegoods with an increase of 34 million yards during the year. Italy also greatly increased her contribution during the year to 24½ million yards against 15½ million yards in the previous year. The Japanese quota still continued to advance, 102·7 million yards having been sent to India during the year under review against 85·8 million yards in 1926-27. The share of the Netherlands declined from 14 million to 12 million yards. The other chief sources of supply were Germany, Switzerland and Belgium, the first two of which sent a little over 2½ million yards each, while the last named sent 1·7 million yards.

DIAGRAM.

(*a*) Variations in the Trade of British India with principal countries during the last ten years as compared with averages of the pre-war, war and post-war periods.

(I)—IMPORTS



The following table shows the percentage share of the United Kingdom and Japan, the two principal competitors in the piecegoods trade in the Indian market, in the total imports of piecegoods in 1913-14 and each of the past four years:—

Percentage share of the United Kingdom and Japan in the Imports of Cotton piecegoods.

—	1913-14.		1924-25.		1925-26.		1926-27.		1927-28.	
	United Kingdom.	Japan.	United Kingdom.	Japan.	United Kingdom.	Japan.	United Kingdom.	Japan.	United Kingdom.	Japan.
Cotton piecegoods—										
Grey . . .	98·8	·5	86·0	13·0	79·2	20·1	78·7	20·7	74·4	24·5
White . . .	98·5	...	97·1	·8	96·0	1·0	96·4	·5	94·7	1·0
Coloured . . .	92·6	·2	83·1	10·0	73·1	19·0	71·1	19·2	69·8	20·3

The distribution of the total import trade in piecegoods among the principal countries concerned is shown in the table below:—

—	1913-14.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
United Kingdom . .	97·1	85·6	87·6	91·2	88·8	88·5	82·3	82·0	78·2
Japan	·3	11·3	8·3	6·8	8·2	8·5	13·9	13·6	16·4
United States . . .	·3	·9	2·1	·5	·5	·5	1·0	·9	1·4
Netherlands . . .	·8	·9	1·1	·8	·7	·6	1·1	1·1	1·0
Other countries . . .	1·5	1·3	·9	·7	1·8	1·9	1·7	2·4	3·0
Total .	100	100	100	100	100	100	100	100	100

An analysis of the total quantity of piecegoods imported into India during 1927-28 shows that 50 per cent. was received in Bengal. Bombay came second in importance as a distributing centre, and the receipts in both provinces showed a substantial

increase compared with the preceding year. Burma recorded a small increase, while Sind and Madras consumed lesser quantities.

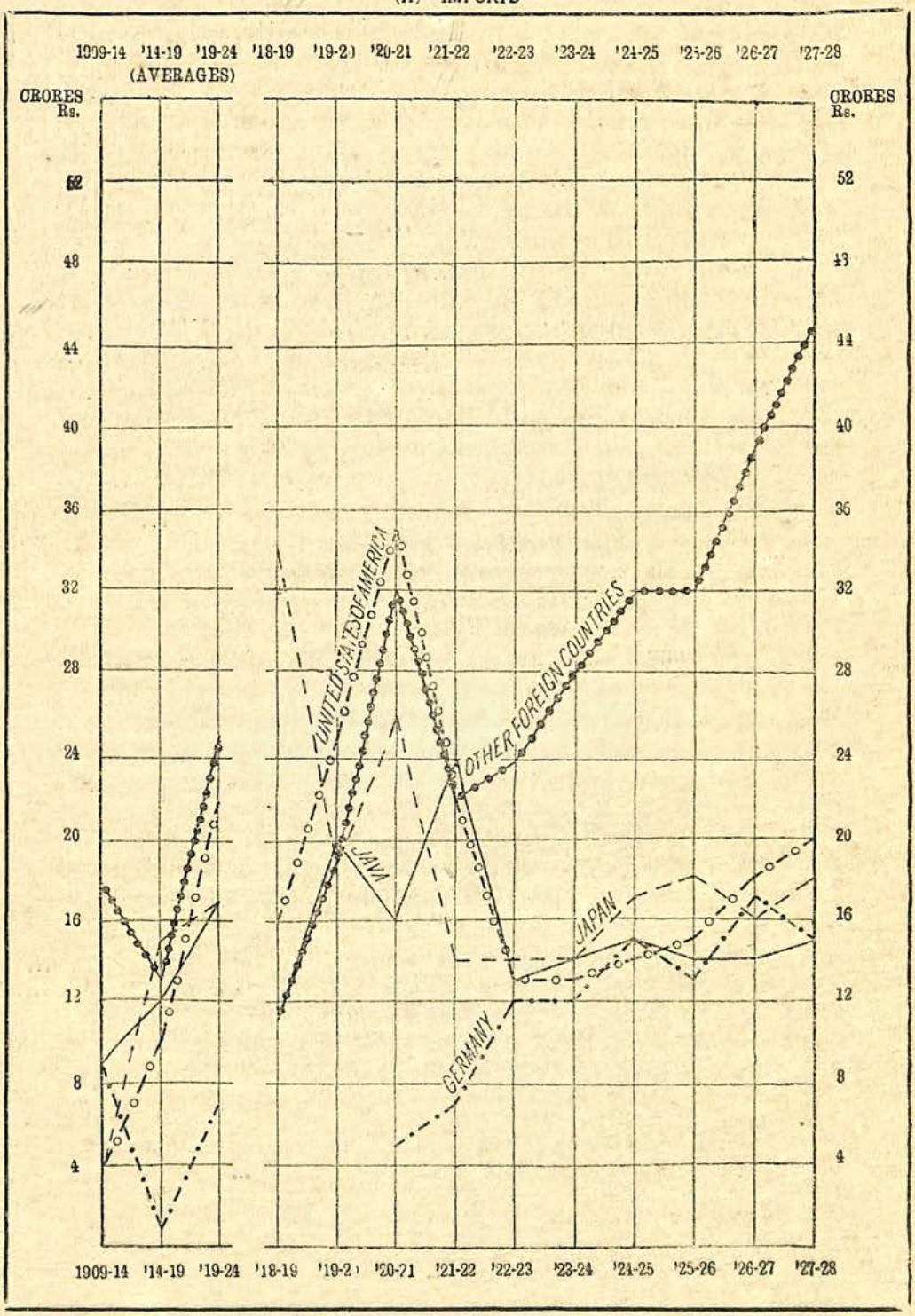
Second in order of importance in India's imports during the year under review comes metals and manufactures of metals, which showed an increase of 38 per cent. in quantity (from 910,000 tons to 1,259,000 tons) and 19 per cent. in value (from nearly Rs. 24 crores to over Rs. 28⅓ crores). Of this total, iron and steel represented 21½ crores and rose to the second place in order of importance, among imports, displacing sugar, which occupied that position in the previous year. If such items as machinery and millwork, railway plant and rolling stock, cutlery, hardware, implements and instruments, and motor vehicles were included under one head with metals and manufactures thereof, the total value would amount to 65⅓ crores, which is nearly 16 crores less than the value of imports of the yarn and textile fabrics, the most important group among imports. The corresponding figures for the preceding year were, for the metal group Rs. 56 crores and for the textiles Rs. 79 crores.

In last year's report reference was made to the fact that India's imports of iron and steel from the United Kingdom were seriously affected by the coal strike in Great Britain during the major portion of the year 1926. During the year under review, however, the imports of iron and steel not only recovered, but reached a record figure. The output of pig iron in the United Kingdom rose from 2½ million tons in 1926 to over 7 million tons in 1927, while the production of steel ingots and castings rose from 3½ million tons to over 9 million tons. The chief competitors of the United Kingdom in the Indian metal market are Belgium and Germany, but extra special efforts were made by British steel makers during the year to reduce prices to the absolute minimum to meet foreign competition. Galvanized sheets, which, as usual, formed the chief single item of manufactured iron and steel, accounted for about 38 per cent. of the total value imported, as compared with 43 per cent. in 1926-27. The United Kingdom, the chief source of imports into India, increased her supplies from 249,000 tons valued at Rs. 6,45 lakhs to 298,000 tons valued at Rs. 7,24 lakhs. There was a fall in the value of the United States' contribution from Rs. 40 lakhs to Rs. 16 lakhs, while consignments from Belgium and Germany rose from Rs. 25 lakhs and Rs. 7 lakhs, to Rs. 49 and Rs. 15 lakhs, respectively. The imports of tinplates recorded a small increase from 22,200 tons valued at Rs. 77 lakhs to 24,000 tons

DIAGRAM.

(*a*) Variations in the Trade of British India with principal countries during the last ten years as compared with averages of the pre-war, war and post-war periods.

(II)—IMPORTS



valued at Rs. 82 lakhs. The trade was practically divided between the United Kingdom and the United States of America, the former increasing her share from Rs. 40 lakhs to Rs. 57 lakhs and the latter reducing her supplies from Rs. 37 lakhs to Rs. 25 lakhs. The imports of steel bars, other than cast steel, rose from 151,000 tons valued at Rs. 1,48½ lakhs to 181,000 tons valued at Rs. 1,83 lakhs, the increase being shared between the United Kingdom, Belgium and Luxemburg. The supplies from Germany, however, declined from 27,000 tons valued at Rs. 25⅔ lakhs to 14,000 tons valued at Rs. 12⅔ lakhs. The imports of beams, channels, pillars girders and bridge-work were double those of the preceding year and totalled 144,000 tons valued at Rs. 1,84 lakhs, against 72,000 tons valued at Rs. 90 lakhs in the previous year, mainly from the United Kingdom and Belgium. Rails, chairs, and fishplates (including those for railways) showed a striking increase from 23,000 tons valued at Rs. 25½ lakhs to 113,000 tons valued at Rs. 1,35 lakhs. This was chiefly due to the construction of the new harbour and railway communications at Vizagapatam, in the Madras Presidency.

The production of pig iron in India has steadily increased since the year 1922-23. Nevertheless, the imports of this commodity rose from 1,600 tons valued at Rs. 2 lakhs to 5,100 tons valued at Rs. 6 lakhs during the year under review, of which the United Kingdom supplied 4,000 tons, compared with 1,000 tons in the preceding year. The imports of iron and steel from the United Kingdom exceeded in volume those of the pre-war year, and totalled 685,000 tons or 57·2 per cent. of the total imports of iron and steel as compared with 406,000 tons or 48·1 per cent. in 1926-27. Next to the United Kingdom came Belgium, the imports from which country rose by 23 per cent. from 257,000 tons to 316,000 tons, although her share in the total trade was 4 per cent. less than in the preceding year. Germany's share fell from 9·3 per cent. to 6·6 per cent. There was, however, an increase in the case of France as a result of her attempt to conserve her overseas markets. The imports of metals other than iron and steel and their manufactures fell from 64,000 tons to 62,000 tons in quantity and from Rs. 7,06 lakhs to Rs. 6,96 lakhs in value. The imports of aluminum, lead, tin and zinc increased, whilst those of brass, copper and quicksilver declined.

Machinery and mill work imports regained its position as third on the list during the year under review, coming next

in importance to cotton manufactures and iron and steel. The total imports of machinery of all kinds, including belting for machinery and printing presses, during 1927-28 were valued at Rs. 16,99 lakhs, as compared with Rs. 14,60 lakhs in 1926-27. The main contributing factor to this increase was the removal or reduction of the Customs duties on certain kinds of machinery from the 1st October, 1927, effected in pursuance of the recommendations of the Indian Tariff Board. With the exception of electrical machinery, rice and flour mill machinery, saw mill machinery and wool machinery, all other descriptions showed substantial increases. Contrary to last year's experience the value of textile machinery imported during the year increased by 23 per cent. from Rs. 2,51½ lakhs to Rs. 3,08⅔ lakhs, of which the United Kingdom's supplies accounted for Rs. 2,89 lakhs or 94 per cent. For some years past the imports of cotton machinery have shown a marked decline, but this tendency was arrested during 1927-28, the imports amounting to Rs. 1,97 lakhs compared with Rs. 1,70½ lakhs in the previous year. Spinning, weaving, and jute manufacturing machinery all showed marked advances, of Rs. 21, Rs. 12 and Rs. 29 lakhs, respectively, while wool manufacturing machinery fell from Rs. 4 to Rs. 1⅔ lakhs. There was a decrease in the imports of electrical machinery from Rs. 2,29½ lakhs to Rs. 2,00 lakhs, the decrease being noticeable in the case of transformers and generating plants. The United Kingdom continued to hold the major portion of this part of India's trade, whilst the United States of America came second. Prime movers, other than electrical, increased in value from Rs. 1,98¼ lakhs to Rs. 2,08 lakhs during the year.

Fourth in order of value in India's imports comes sugar. An increase in world production and falling prices were the chief features of the sugar market during the year under review. The world production of sugar in the season 1927-28 was 25,250,000 tons, showing an increase of 1,517,000 tons over the preceding year in spite of the reduction of the Cuban crop to 4 million tons. The bulk of India's sugar supplies is drawn from Java. At the opening of the year stocks of sugar in India were ample to meet all demands, and with prospects of a surplus crop importers were content to postpone purchases until a lower level of prices was reached. Both Japan and China influenced this action to a large extent, because of the financial troubles in the former country and the civil war in the latter. Simultaneously the beet sugar crop in Europe was

better than usual, and India remained the only large market available for Java. Thus Indian importers were able to exert pressure on Java and bring down the rates. Imports of sugar of all sorts (excluding molasses) in 1927-28 declined from 826,900 tons valued at Rs. 18,36 lakhs to 725,800 tons valued at Rs. 14,50 lakhs. This decline was at the expense of beet sugar, while cane sugar actually recorded an increase as a result of low prices. Sugar supplies from the United States of America dwindled to almost nothing, though in 1926-27 that country sent 11,600 tons to India. Canada's supplies, too, were very low—only 400 tons compared with 4,650 tons during the preceding year. Bombay, Karachi, Madras and Burma showed increases of imports of Java sugar, and took 23, 21, 7 and 7 per cent. respectively of the total supplies of Java sugar to India. The imports of beet sugar during the year showed a marked decrease on the figures for the previous year, the total being only 18,000 tons as compared with 176,000 tons in 1926-27.

Mineral oils were again fifth in order of importance in India's import trade during the year under review. The total imports of all kinds of mineral oils from foreign countries in 1927-28 increased to 232 million gallons valued at over Rs. 10,44 lakhs, as compared with 184 million gallons valued at Rs. 8,89 lakhs in the preceding year. Of this amount about 41 per cent. consists of kerosene oil, 46 per cent. of fuel oil and 11 per cent. of lubricating oils. The imports of kerosene oil advanced by 30 million gallons to nearly 94½ million gallons in quantity and by Rs. 1·10 lakhs to Rs. 5,39⅓ lakhs in value. The principle feature of the year with regard to oil was the rate war, in which keen competition was shown between the products of the Burma Oil Company and that of the Standard Oil Company. The question whether indigenous oil concerns in India should be afforded protection was the subject of an enquiry by the Tariff Board during the year, but before the publication of their report the price war was called off and the competing companies entered into a mutual arrangement. The Tariff Board found that there was no case for any protective measure to the oil industry in India, and the Government of India agreed with this view. Nearly half of the supplies of kerosene oil imported into India during the year were from the United States of America, against 87 per cent. in the preceding year, while Russia (including Georgia) contributed over 19½ million gallons valued at Rs. 1,03 lakhs. Imports from Borneo, Persia, and the Straits Settlements increased during the year, while the coast-wise imports of kerosene oil from Burma declined from 130 million gallons in 1926-27 to 120 million gallons in the year under review. There

was a sharp rise in the import of foreign motor spirit during the year from 3,800 gallons to 138,000 gallons. Coastwise imports of petrol and other motor spirit from Burma into India amounted to 39 million gallons, compared with 29 million gallons in the preceding year.

Sixth on the list of India's imports during the year 1927-28 came motor vehicles. There was a general fall in the prices of all motor vehicles during the year, due mainly to the reduction of the duty on motor cars and motor cycles from 30 to 20 per cent. *ad valorem*, and on pneumatic rubber tyres and tubes from 30 to 15 per cent. from March 1st, 1927. This, combined with keen competition in the automobile trade, was responsible for an increase of 15 per cent. in the number of motor vehicles imported into India in 1927-28, the figures being 15,122 valued at Rs. 3,54 lakhs. The United States of America took the lion's share of the trade, the number of cars from that country numbering 6,031 valued at Rs. 1,34½ lakhs. The United Kingdom, however, strengthened her position and sent 3,600 cars to India, valued at Rs. 1,02½ lakhs, compared with 2,546 cars valued at Rs. 80 lakhs in the preceding year. It is note-worthy that the average declared value of cars imported from the United Kingdom fell from Rs. 3,159 in 1926-27 to Rs. 2,849 in 1927-28, the decline being illustrative of the efforts made by British manufacturers to increase their stake in the Indian market by lowering prices. The imports of cars from Canada, Italy, France and Belgium decreased during the year. India still lacks a net-work of good roads throughout the country, and that is one of the chief factors operating against the more rapid development of motor transport in this country.

The imports of motor cycles increased by 19 per cent. from 1,803 in 1926-27 to 2,146 in the year under review, and by 14 per cent. in value from Rs. 10,47,000 to Rs. 11,96,000. The United Kingdom supplied 91 per cent. of the total imports against 92 per cent. in the preceding year. The imports from the United States of America again declined from 75 to 67, while those from Germany and France showed a slight increase. The rapid expansion of motor transport in India led to a further increase in the import of motor omnibuses, vans and lorries during the year. The imports totalled 8,682, valued at Rs. 1,49 lakhs against 6,343, valued at Rs. 1,20 lakhs in the preceding year. Of these 7,412 represented chassis with a total value of Rs. 1,22 lakhs against 5,345 valued at Rs. 96 lakhs in 1926-27. Canada and the United States of America

produced the bulk of the supplies, the British manufacturers being unable to make much headway in the Indian market owing to the attractive prices offered by their Canadian and American competitors. The imports from Canada rose from 3,529 to 4,268 in number and from Rs. 48 lakhs to Rs. 54¾ lakhs in value. The supplies from the United States of America increased from 2,322, valued at Rs. 49⅓ lakhs to 3,699 valued at Rs. 67½ lakhs. The United Kingdom sent 447 vehicles valued at Rs. 22¾ lakhs, compared with 341 valued at Rs. 19 lakhs in the preceding year.

The reduction of duty and the increase of motor transport were responsible for a substantial increase in the imports of rubber manufactures. The number of pneumatic motor covers imported increased by 35 per cent. from 311,000 to 419,000, and their value from Rs. 1,18 lakhs to Rs. 1,69¼ lakhs. The imports from both the United States and Canada were almost double those of the preceding year, but only a slight increase in the number of tyres supplied by the United Kingdom was recorded on the figures for 1926-27. In pneumatic cycle covers and motor tubes the United Kingdom was the foremost supplier to the extent of 55 per cent., the balance being equally divided between Canada, the United States of America and France. The total value of all tyres and tubes for motor vehicles amounted in 1927-28 to Rs. 2,19 lakhs, compared with Rs. 1,56 lakhs in the preceding year. This figure is the highest ever recorded since statistics have been kept.

The year under review saw a further expansion of the trade in artificial silk, and the figures given below show that the great advance which commenced in 1924-25 has been steadily maintained.

	lbs. (000).	Rs. (000).
1922-23	225	13,40
1923-24	406	19,55
1924-25	1,171	42,40
1925-26	2,671	74,72
1926-27	5,776	1,02,64
1927-28	7,510	1,49,21

Nearly the whole of the increase in the imports of artificial silk during the year was contributed by Italy, although the United Kingdom was a close competitor. The quantities imported from Italy and the United Kingdom during 1927-28 were 3,432,000 pounds and 2,277,000 pounds, as compared with 3,843,000 pounds and 655,000 pounds, respectively, in the preceding year. These

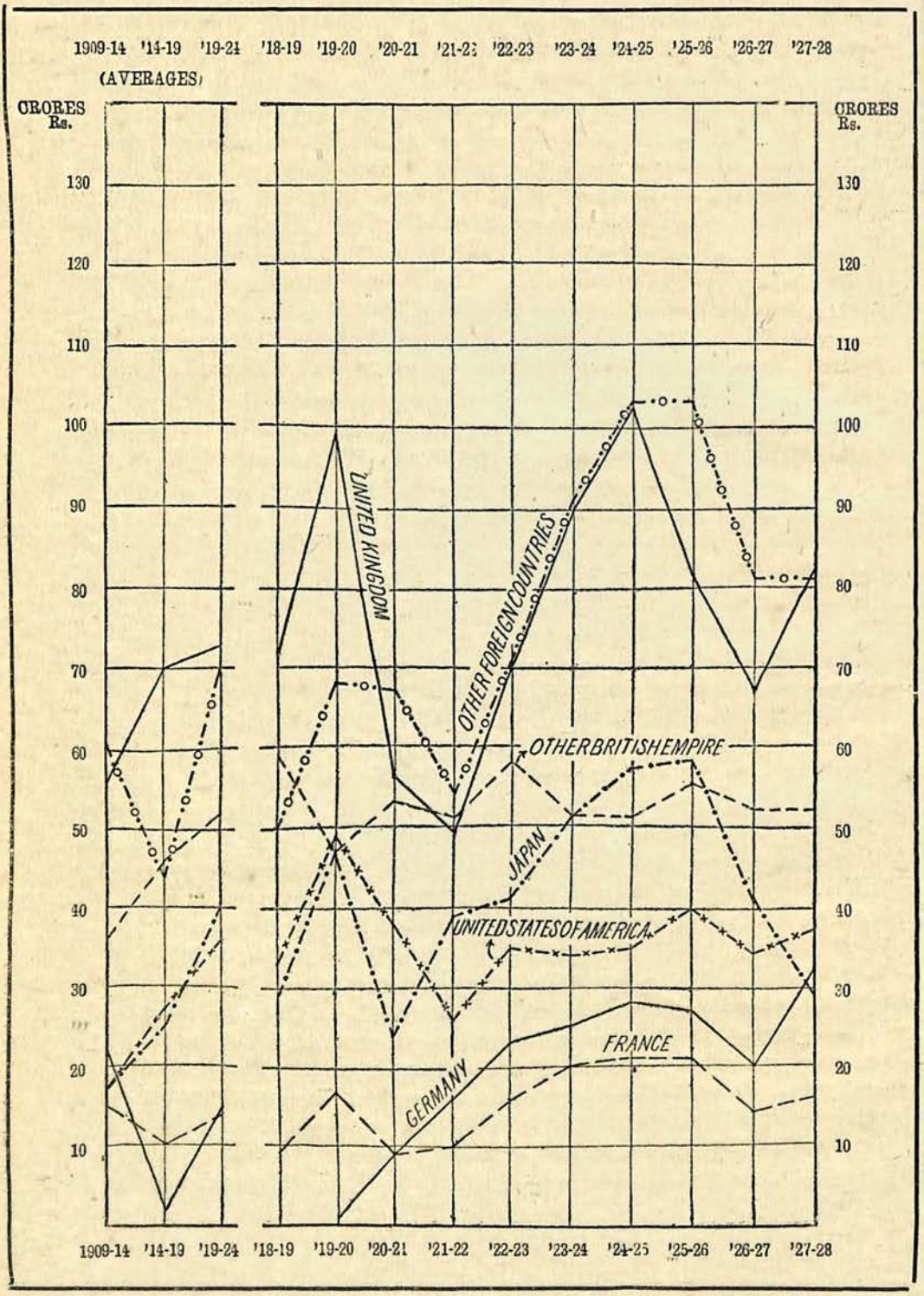
figures show that the imports from Italy during 1927-28 were slightly less than in the previous year, while the British trade registered an advance of 248 per cent. Imports from Germany and Switzerland declined during the year, while those from the Netherlands, France and Belgium increased. The total imports of artificial silk yarn were valued at Rs. 1,49 lakhs, Italy being responsible for Rs. 66¼ lakhs and the United Kingdom for nearly Rs. 47 lakhs. In imports of cotton piecegoods and artificial silk there was an increase of over 11 million yards during the year, the total takings amounting to 53,141,000 yards, valued at nearly Rs. 3,86½ lakhs or about Rs. 80 lakhs more than in the preceding year. In the previous year the United Kingdom was the largest single supplier, but in the year under review Italy advanced her sales to over 16 million yards against nearly 14 million yards in 1926-27. Switzerland, Germany, Austria, Japan and Czecho Slovakia also increased their share of this trade to a notable extent, while Belgium's share in the trade fell from 980,000 yards to 757,000 yards. The set back in the United Kingdom's trade can be attributed to the competition of the cheaper lines of cloth marketed by other countries, and the fact that the combined share of Italy and the United Kingdom's trade in this class of goods fell by 14 per cent. during the year is evidence of steadily growing competition. The imports of raw wool advanced from nearly 5 million pounds valued at Rs. 32 lakhs in 1926-27 to 5·8 million pounds valued at Rs. 45 lakhs in the year under review. Persia, the United Kingdom and Australia were the principal countries of supply. Britain's quota amounted to 1·6 million pounds against 1·5 million pounds in the preceding year. The import trade in woollen piecegoods showed a steady advance in 1927-28, the imports being 18·8 million yards valued at Rs. 3,28½ lakhs, an increase of 22 per cent in quantity and 18 per cent. in value over 1926-27. Imports from the United Kingdom amounted to over 7 million yards valued at Rs. 1,62 lakhs, the figures for the preceding year being 6 million yards and Rs. 1,42½ lakhs. France came next with 4·4 million yards, as against 2·2 million yards in the previous year. Germany and Japan's share in this trade increased slightly during the year, but the Belgian share was negligible.

India's imports of railway plant and rolling stock, both for private and Government concerns, improved during the year from Rs. 6,08 lakhs to Rs. 9,35 lakhs, of which Rs. 4,77 lakhs represented importations on private account and Rs. 4,58 lakhs on

DIAGRAM.

(b) Variations in the Trade of British India with principal countries during the last ten years as compared with averages of the pre-war, war and post-war periods.

EXPORTS



Government account, against Rs. 3,25 lakhs and Rs. 2,83 lakhs, respectively, in the preceding year. Thus the marked fall which was recorded in our last report was made up during 1927-28. Belgium's importance in this class of goods is worthy of notice. Her share in 1927-28 was 23·9 per cent., against 17·4 per cent. in 1926-27 and 9·2 per cent. in 1925-26.

The import trade in both alizarine and aniline dyes showed an increase during the year. While the imports of alizarine dyes from Germany showed a reduction from 4,145,000 pounds to 3,577,000 pounds, the United Kingdom's share, on the other hand, increased from 742,000 pounds in 1926-27 to 1,284,000 pounds in the year under review. Aniline dyes from the United States of America, which have lately been making great advances in the Indian market, were imported to the extent of 1,327,000 pounds, or 600,000 pounds less than in the preceding year. Direct imports from Germany, however, increased by 3 million pounds to over 9 million pounds. The British share in the imports of aniline dyes declined by 19 per cent. to 357,000 pounds, while the shares of Switzerland and Italy rose from 404,000 pounds and 268,000 pounds to 520,000 pounds and 731,000 pounds, respectively.

* * *

Turning now to the export trade of India in the year under review we notice that jute and cotton and their manufactures, grains and tea were in practically the same position as in the previous year. The first place in the export trade for 1927-28 again fell to jute. Two successive good crops and a steady demand for both the raw material and manufactured articles enabled the total exports of jute during the year to eclipse the previous year's record. The prices were well maintained owing to high consumption and heavy buying ahead by spinners, both in India and abroad. At the beginning of April the price of raw jute at Calcutta was Rs. 62-8 per bale of 400 pounds, but the rates gradually fell as a result of the anticipation of a good crop, and by May had reached Rs. 55. In June, however, the course of the market suddenly changed, and by the third week in August the price had risen to Rs. 75. This rise was the result of several factors—an unexpectedly steady demand from foreign countries towards the close of the season 1926-27, improvement in hessian prices, lateness of the new crop, want of rain in jute districts, and speculative activity resulting from these circumstances. On September 20th, the price stood at Rs. 69 per bale, and when the final crop estimates became

available prices fell further, Rs. 64-8 being reached on the 27th of September. The course of prices during the remainder of the year was between Rs. 59 and Rs. 63. The total weight of raw and manufactured jute exported during the year was 1,777,000 tons, or 208,000 tons more than in the preceding year, while the total value increased from Rs. 80 crores to Rs. 84·2 crores. Raw jute accounted for 36 per cent. of this value, and jute manufactures for 64 per cent. as compared with 33 and 67 per cent., respectively, in 1926-27. The quantity of raw jute exported was 26 per cent. higher than that in the preceding year, and the exports of bags increased in number from 449 millions to 463 millions, and of gunny cloth from 1,503 million yards to 1,553 million yards.

Of 4,995,000 bales of raw jute exported during the year, Germany took 1,339,000 bales as against 1,025,000 bales in the preceding year—an increase of 36 per cent. There was also a considerable improvement in the takings of jute by the United Kingdom, her imports amounting to 1,244,000 bales valued at Rs. 7,68 lakhs as compared with 968,000 bales valued at Rs. 6,14 lakhs in the preceding year. The Netherlands, Belgium, Spain, Italy and Brazil increased their takings, while the United States of America took only 472,000 bales compared with 489,000 bales in the preceding year.

The total exports of gunny bags increased in number from 449 millions to 463 millions, and Australia remained the best market for this commodity. The United Kingdom accounted for over 46 millions as against 39 millions in the preceding year, while Java and the Straits Settlements reduced their demands slightly. The Union of South Africa and China increased their takings, and the United States of America and Cuba took smaller quantities.

The trade depression consequent on the financial crisis in Japan and the unsettled political conditions in China greatly affected the exports of raw cotton from India during the year, which were reduced to 2,686,000 bales from 3,188,000 bales in the preceding year. Other factors were the comparative dearness of Indian cotton in relation to American, and the large outturn of the Chinese cotton crop. The Indian cotton crop of the 1927-28 season was estimated at 5,963,000 bales of 400 pounds each, as compared with 5,024,000 bales in the preceding year. The American cotton crop of 1927 was a short one, unlike the crops of the three preceding years. The Egyptian crop also gave a much smaller yield. Indian cotton prices followed the trend of those of America, as usual. From

May onwards there was a steady advance in prices until June. After a temporary set-back which lasted till August, a further rise took place, which was maintained with occasional slight fluctuations until the close of March. The total exports of raw cotton to the Continent were 1,102,000 bales compared with 821,000 bales in the preceding year. There was an improvement in the United Kingdom's demands, which rose to 160,000 bales compared with 87,000 bales in the preceding year. Exports from Bombay were 63 per cent. of the total quantity of raw cotton exported, those from Karachi 27 per cent. and from Madras 5 per cent. The shortage of Indian staple cotton, combined with the fact that Indian prices were out of parity with American prices for considerable periods, was responsible for heavy imports of foreign cotton into Bombay.

The cotton industry passed through another period of depression during the year under review. The production both of yarn and piecegoods increased, but exports declined, and there was a heavy accumulation of stocks. The production of yarn in Indian mills in 1927-28 increased to 809 million pounds, compared with 807 million pounds in the preceding year. The exports of yarn fell by 40 per cent. in quantity from 41½ million pounds in 1926-27 to 24¾ million pounds in the year under review. The value realised fell from Rs. 3,08½ lakhs to Rs. 1,88 lakhs, a decline of 39 per cent. China, usually the most important market for Indian cottons, actually sold large quantities of cotton yarn in the Indian market, under-cutting the local product and the imports from other sources. Had Chinese requirements been maintained at the preceding year's level the year under review would have compared favourably with 1926-27. Syria, Iraq, and Persia also reduced their purchases considerably, while slight increases were recorded in the shipments to Egypt, Aden and Siam. Shipments to the United Kingdom, Greece, and Turkey (European) showed some increases.

The total production of piecegoods in Indian mills in 1927-28 increased in quantity by 4 per cent. as compared with the preceding year, but the proportion of exports of piecegoods to the total production was 7 per cent. as compared with 8·7 per cent. in 1926-27. Measured in yards, however, the actual quantity exported compared with that of the preceding year declined by 29 million yards. There was a marked decline in the export of coloured, grey and white piecegoods. The chief single customer in Indian piece-

goods during the year was Persia, which took 28·2 million yards against 37·8 million yards in the preceding year. Iraq was the premier market last year, but took only 24·1 million yards in 1927-28, while the Straits Settlements took 3 million yards less than in the preceding year. Ceylon's requirements, too, fell from 21·7 million yards to 19·6 million yards. The total value of piecegoods exported in 1927-28 was Rs. 6,18½ lakhs as compared with Rs. 7,32½ lakhs in 1926-27. Grey goods accounted for Rs. 53 lakhs, coloured Rs. 5,60 lakhs, and white goods for the remainder.

In last year's report reference was made to a Trade Mission to the Near East and Africa appointed by the Government of India on the recommendation of the Indian Tariff Board to make a survey of the potential markets in those countries for Indian cotton goods and to make recommendations for the encouragement of the export of cotton manufactures from India. The Mission assembled in Bombay on January 27th, 1928, and proceeded to Bushire, Basra, Baghdad, Damascus, Aleppo, Constantinople, Beyrut, Cairo and various other places. The Mission completed their report in July of the same year, and made many important recommendations for the marketing of Indian cotton piecegoods in the Near East and Africa. The most important recommendation of the Mission was the appointment of three Trade Commissioners for India to be stationed at Alexandria, Mombasa and Durban. Other recommendations included suggestions for better marketing methods and the development of the existing piecegoods trade with Persia, Iraq and East Africa.

The exports of food grains, pulses and flour made some recovery during the year under review as a result of larger shipments of wheat. The total quantity exported amounted to 2,784,000 tons against 2,429,000 tons in the preceding year, the value rising by Rs. 3,67 lakhs to Rs. 42,92 lakhs. Shipments of wheat increased by 70 per cent. from 176,000 tons to 300,000 tons, and in husked rice by 117,000 tons to 2,152,000 tons. Rice accounted for 79 per cent. of the total quantity of food grains and flour exported, as compared with 85 per cent. in the preceding year. Wheat and wheat flour contributed 13 per cent. to the exports against 10 per cent. in 1926-27, and pulses 5 per cent., as in the preceding year. The production of cleaned rice in 1927-28 was 1·5 million tons less than in the previous year, but the exports of rice and paddy together registered an advance over the preceding year by over 128,000 tons. Burma alone possesses a large exportable surplus

An Aerial View of Karachi Port showing the Harbour, Boat Basin, Oil Installations and Shipping Berths. Ninety-nine per cent. of India's wheat exports during the year 1928-29 were shipped *via* Karachi.

of this commodity, the total exports from that country in 1927-28 being 1,888,000 tons compared with 1,787,000 tons in the preceding year. As in the previous year Ceylon took the largest quantity of rice during the year, namely 461,000 tons, Germany coming second with 346,000 tons. Demands from the Straits Settlements, China and the United Kingdom decreased considerably during the year.

The total exports of wheat during the year showed a marked improvement as compared with 1926-27, but were far below the pre-war average of 1,308,000 tons, the total being 300,000 tons valued at Rs. 4,40½ lakhs, as compared with 176,000 tons valued at Rs. 2,71 lakhs in the preceding year. As usual the United Kingdom took the major portion of the shipments, namely 251,000 tons valued at Rs. 3,66 lakhs. The wheat crop of 1926-27 was satisfactory, but with an increase in internal consumption and ample world supplies available the rates offered during the greater part of the year were not sufficient to induce withdrawals from local consumption. France and Belgium were the second best customers with 20,500 and 19,700 tons, respectively. Ninety-nine per cent. of the wheat exports from India passed through the port of Karachi.

The tea industry had another prosperous season in 1927-28. Although the production of tea fell short of the preceding year's record, the exports increased and prices throughout the season were well maintained. The climatic conditions during the early part of the season were unfavourable to the crop in Northern India, and the outturn till July was 12 million pounds behind that of the corresponding period of 1926. The largest decline in production was in Assam, the output in that area falling short by 6 million pounds compared with the previous year's record. The total production of tea in 1927 was estimated at 391 million pounds as compared with 393 million pounds in 1926. Assam, as usual, contributed the larger share, her production being 60 per cent. of the total output, while Northern India contributed 26 per cent. and Southern India 14 per cent. The total area under tea in 1927 was 753,000 acres as against 739,000 acres in 1926. The total shipments of tea during the year showed an increase of 4 per cent. in quantity and 12 per cent. in value. Only 946,000 pounds of green tea was exported during the year, the balance of 360⅔ million pounds consisting of black tea, of which the shipments to the United Kingdom totalled 306 million pounds valued at Rs. 28⅓ lakhs as compared with 290½ million pounds valued at Rs. 24½

lakhs in the preceding year. The United Kingdom absorbed 85 per cent. of India's tea exports, compared with 84 per cent. in the preceding year. Re-exports of Indian tea from the United Kingdom in 1927-28 were about the same as the preceding year, amounting to approximately 45 million pounds. Re-exports to the Irish Free State amounted to nearly 17 million pounds, a slight decrease on the previous year's quota, while other European countries and the United States of America took smaller quantities. Direct shipments of tea from India to the United States of America, however, increased from 7·6 million pounds to 8·8 million pounds, while Indian exports to Canada decreased from 11·5 million pounds to 9·3 million pounds. The main feature of the Indian tea export trade during the year was the direct buying by Russia, which absorbed 6⅓ million pounds, compared with 101,000 pounds in 1926-27.

Oil seeds occupied the fifth place among India's exports during the year, and showed an increase of 44 per cent. in quantity and 40 per cent. in value over the preceding year's figures. Compared with the pre-war average, however, there was a decrease of 17 per cent. in quantity, but an increase of 9 per cent. in value. The total exports of oil-seeds amounted to 1,210,000 tons valued at Rs. 26,69 lakhs.

In our last report we pointed out that the Indian export trade in oil-seeds is suffering from a growing competition of other producing countries, with the inevitable result of a steady fall in the pre-war average. The trade in Indian ground-nuts, however, was an exception to this rule. The outturn during the 1926-27 season was the highest ever recorded, namely, 2,046,000 tons. The exports also attained the record figure of 613,000 tons in 1927-28, compared with 368,000 tons in the previous year. This increase in exports is due not only to the larger crop, but also to other factors such as larger demands following the resumption of normal trade conditions in Europe, better facilities in securing freights to continental ports and the release of speculative holdings of the produce of 1926-27 by exporters who were waiting for favourable markets and easier freights to clear their stocks. Germany was the largest purchaser of Indian ground-nuts during the year with 218,000 tons or 36 per cent. of the total quantity exported. France came second with 151,000 tons. The Netherlands, Italy, the United Kingdom and Belgium all increased their demands during the year.

Of other exports, hides and skins showed a marked improvement in the year under review owing to a world shortage of hides and leather. The leather stocks of the world were greatly depleted and the available supply of hides was insufficient to meet the increasing demand. Shipments of raw hides and skins during the year, therefore, amounted to 64,400 tons valued at Rs. 8,81 lakhs, as compared with 50,600 tons valued at Rs. 7,18 lakhs in the preceding year. Exports of raw wool continued to expand during the year, rising from 45 million pounds to 50 million pounds in quantity and from Rs. 3,93 lakhs to Rs. 4,36 lakhs in value. As usual the United Kingdom took the bulk of India's exports, the figures being nearly 44 million pounds or 87 per cent., while the remainder went mainly to the United States of America. The production of pig iron in India increased from 957,000 tons in 1926-27 to 1,162,000 tons in 1927-28. The exports increased from 309,000 tons to 393,000 tons in quantity and from Rs. 1,40 lakhs to Rs. 1,79 lakhs in value. Japan, always the best customer for Indian pig iron, increased her taking from 234,000 tons to 271,000 tons, the United Kingdom coming second with 21,000 tons against 16,000 tons in 1926-27. The United States of America and Germany both increased their demands, as also did Sweden, the Straits Settlements, Italy and Belgium. Chinese requirements, however, fell from 7,616 tons to 4,009 tons. The exports of unmanufactured tobacco further receded by nearly 1 million pounds to 28 million pounds. The value realised, however, was Rs. 1½ lakhs more than in the preceding year, and the principal customers were the United Kingdom and Aden. The exports of manufactured tobacco, however, increased from 911,000 pounds to nearly 1·2 million pounds.

Having discussed the leading features in the distribution of India's overseas trade we may now set down a few general remarks. The year under review saw Great Britain recovering from the depressing effects of a protracted coal strike, while on the continent the year witnessed the return of Italy to the gold standard and the virtual stabilisation of the French Exchange. Throughout the year conditions in the Far East were very unsatisfactory, and this had a corresponding adverse bearing upon India's overseas trade. Both Japan and China purchased less of India's goods during the year, but their exports to India were increased. In the case of the United Kingdom, however, the excess of imports over exports to that country declined by Rs. 8 crores to Rs. 37 crores in spite of an increase under imports, owing to the good demand which Indian staple articles

enjoyed and to the decline in the prices of the principal imported articles. The net results of the trade with European countries and the United States of America showed larger balances in favour of India than in the preceding year, the surplus in the case of the continent increasing by Rs. 19 crores to Rs. 40 crores. The United Kingdom's share in India's import trade remained much the same as in the preceding year. In exports, however, her share increased by nearly 4 per cent. to 25 per cent. The share of the other parts of the British Empire in imports declined from 7·1 per cent. to 6·9 per cent., and in exports from 17 per cent. to 15·1 per cent. The whole British Empire had 46·3 per cent. of the total trade compared with 45·5 per cent. in the preceding year. The United States of America claimed 8·2 per cent. of the import trade as against 7·9 per cent. in the preceding year, while in exports her share remained unchanged at 11·1 per cent. Germany's share in the import trade fell from 7·3 to 6·1 per cent., but her share in the export trade increased by 3 per cent. to 9·9 per cent.

Turning now to individual heads we notice that the percentage share of the United Kingdom in the imports of cotton manufactures declined from 75·3 to 72·1, while the Japanese share increased from 17·2 per cent. to 18·1 per cent. The shares of the United States of America and Italy also showed increases. In the imports of iron and steel the United Kingdom's share showed an increase of nearly 6 per cent. consequent upon increased production and better prices, while the shares of other countries declined. In machinery and hardware the United Kingdom increased her share, while there was a considerable decline in the share of the United States of America. In the imports of motor vehicles there was a small increase in the United Kingdom's share, but this was to a large extent overshadowed by a much larger increase in the case of the United States. Canada's share in the motor vehicles trade fell by 5 per cent. The imports of railway plant from the United Kingdom also advanced from 61·6 per cent. to 77·9 per cent., while those of Germany and the United States of America declined. On the export side the United Kingdom's share in the total exports of tea increased from 85 to 87·5 per cent., while the United States of America also slightly increased her purchases of Indian tea from 2·1 to 2·3 per cent. The shares of Australia, Canada and the Persian Gulf markets declined. In raw jute, Germany increased her share from 27·6 per cent. to 27·8 per cent., and the share of the United Kingdom increased from 22·9 per cent. to 25 per cent.,

while those of France, Italy and the United States declined. In exports of jute manufactures the shares of both the United Kingdom and Australia fell, but that of the United States increased from 35 to 36·2 per cent. Of the total exports of raw cotton, Germany, the United Kingdom, Italy and Belgium increased their shares, while Japan's quota receded from 58·7 to 46·1 per cent. and that of China from 13·1 to 4·2 per cent.

From the above outline it will be seen that India's foreign trade showed considerable improvement during the year 1927-28. The monsoon of the year was unusually good, except for devastating floods in certain areas, and the output of crops was on the whole satisfactory. The exchange was stable and there was a steady demand for the staple articles of Indian produce with the exception of cotton, which showed a marked decline for reasons already explained. The reader will note that the shipments of raw jute during the year surpassed all previous records, while at the same time prices maintained a satisfactory level. The most depressing feature of the situation was cotton and cotton manufactures, the exports of the former being seriously affected by the political and economic situation in China and Japan. With the exception of sugar nearly all the principal articles of import advanced during the year—particularly luxury articles such as motor-cars, silk and artificial silk, and cigarettes. The trade position of India during the year under review was one of confidence and satisfaction, there being very few dark spots in the picture.

It is unnecessary to dwell at any length on India's land frontier trade, in which the traffic in a certain number of selected articles at certain railway stations adjacent to certain important trade routes across the frontier is registered. During the year 1927-28 the imports and exports of practically all the important items in India's frontier trade showed an increase, and even when compared with her great volume of overseas trade India's land frontier trade is now far from negligible, the exports of food grains and flour amounting to several million maunds. The principle followed in the registration of the land frontier trade of India was extended to Burma in 1926, the stations selected being Bhamo in the north, which catches the trade entirely river-borne as well as the trade despatched from or to the rail-head Katha, to the railway heads of Lashio and Heho in the Shan States; and Thingannyinaung in the south, through which the bulk of the trade with Siam passes.

CHAPTER VII.

Finance.

In order that the reader may thoroughly understand Indian political problems a brief sketch of the financial relations between the Central Government and the provinces in this country is necessary, particularly outlining the developments since 1921, the year in which the present system of Government came into operation as a result of the Montagu-Chelmsford Reforms. The beginning of the control of the Provincial Governments over their own finances dates from 1870, when Lord Mayo started that process of devolving financial and general administrative authority on the Provinces which has resulted in the quasi-federal system which exists to-day. Before his time all the revenues of India went into one purse, and the Provinces were allotted for their annual expenditure only those sums which the Government of India thought fit, or which they could be persuaded or cajoled into granting. The inevitable result of such a system as this was that the distribution of the public income degenerated into something like a scramble, in which the most violent had the advantage, with very little attention to reason.

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Lord Mayo's solution was to give each Province a fixed annual grant for the administration of the Provincial services and also to give Provincial Governments an interest in nursing the taxable capacity of their subjects by allowing them to impose certain local taxes in aid of the grant from the Central Government. It was not long, however, before further changes were called for, and between 1877 and 1883 the financial relations between the Central Government and the Provinces experienced further developments, including the resettlement on a wider basis of the system of Provincial finances. For example, in the Provincial settlements of 1870-71 a fixed sum had been made over to each Local Government to defray the cost of Provincial services, but by these subsequent reforms a share in the revenues was substituted for the fixed grant. This gave a margin which might be increased by careful management. The settlements were made liable to periodical revision and the system thus established existed

with modifications until the end of the first decade of this century. This is the beginning of the system of the division of revenue heads into central, provincial and divided—a system which lasted until the Montagu-Chelmsford Reforms. The heads of revenues which were made over to the Provinces were believed to be capable of expansion by careful management and thus likely to meet provincial needs. But, of course, revenue and expenditure in the provinces could not be made to meet exactly, and so the excess of provincial expenditure over revenue was made up by assignments from the Central Government expressed as a percentage of the land revenue of each province, which was otherwise a Central receipt.

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The principal land-marks in the history of Central and Provincial financial relations between Lord Mayo's and immediately subsequent Reforms, and the introduction of the Montagu-Chelmsford Reforms in 1921 are the quasi-permanent settlements which came into operation from 1904 onwards, and the permanent settlements from 1911-1921. By the former the revenues assigned to a province were definitely fixed and were not subject to alteration by the Central Government except in cases of extreme and general necessity, or unless experience showed that the assignment made was disproportionate to normal provincial needs. The object of this reform was to give to the Provinces security and a motive for economy and careful husbanding of resources. Henceforward the Provinces could maintain some continuity of financial policy since they were assured that they would reap the benefits of their own economies and would not be forced into ill-considered schemes of expenditure merely in order to show at the next settlement with the Central Government that their scale of expenditure was high and their needs corresponding thereto. The financial reform of 1911 made the settlement absolutely permanent. In 1911 also the fixed assignments to the Provinces were reduced, but the provincial share of growing revenue was increased. During these years a further benefit was conferred on the Provinces by the introduction of a new Famine Insurance Scheme in 1906, by which the Government of India placed to the credit of each Province exposed to famine a fixed amount on which it could draw in time of need without trenching on its normal resources. If this

fund became exhausted, further expenditure would be shared equally by the Central and Provincial Governments, and, in the last resort, the Government of India would give the Provinces further assistance from Central Revenues. In 1917 these arrangements were modified and famine relief became a divided head, the expenditure being apportioned between the Central and Provincial Governments in the proportion of 3 to 1. Before this scheme was introduced, the liability for famine expenditure had lain upon the provinces, and the Central Government had only intervened when the latter's resources had become exhausted.

Thus, at the time of the Montagu-Chelmsford Reforms, the financial relations between the Government of India and the Provincial Governments were broadly these. The budget of the Government of India was made to include the transactions of Provincial Governments, the revenue enjoyed by the latter being mainly derived from sources of income which were shared between the Government of India and themselves. Generally speaking, certain heads of revenue, such as the land revenue, excise, income-tax, and the profits from productive irrigation works, were divided between the Provincial and the Central Governments. The Provincial Governments took the receipts from Forests and Registration, as well as from Courts and Jails. To the Government of India went the revenue from opium, salt, customs, railways, posts and telegraphs, and tributes from Indian States. The Central Government, out of these incomings, was responsible for defence charges, for the upkeep of railways and posts and telegraphs, for the payment of interest on debt, and for the Home charges. The provinces, from their incomings, met the expenses connected with land revenue and general administration, with forests, police, courts and jails, with education and with medical services. Charges for irrigation were common to both the Central and to the Provincial Governments.

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The basic principles of the Montagu-Chelmsford Reforms are completely opposed to the principles upon which the old settlements were based. There is no need to discuss here the wider objects of the new model of government which was introduced by these Reforms, but the most obvious ways in which it affects the financial relations between the Central Government and the

Provinces may be briefly outlined. In the first place we may consider the effect of dyarchy, that is, the division of the departments of provincial administration into reserved and transferred departments, which introduces a new conception into the Government of India. The reserved departments, which include such services as police and irrigation, are still kept under executive control, but the transferred departments, among which are numbered the well-named " nation-building " services, like education, local self-government, agriculture, sanitation and so on, are now transferred to the ultimate control of the Provincial legislatures. Behind these far-reaching administrative changes lies the deeper purpose of introducing India to responsible self-government, and it is in the provinces and by the medium of dyarchy that this purpose is meant to be achieved. There is no dyarchy in the Central Government, which still remains under official control tempered largely, it is true, by the influence which the central legislature can bring to bear upon the Executive Government. This at once brings us up against the basic conditions of the financial system, which is the corollary of the new system of government, for the Provincial Governments are now, so far as some of their most important activities are concerned, popular governments responsible for their doings, in the transferred departments, through ministers to popularly elected legislative councils. Therefore it is clear that the old financial system which admitted almost unlimited control on the part of the Central Government over the financial and general administration of the provinces had to go. It has been shown that the " divided heads " were the most typical feature of the old system, and that these " divided heads " provided the Central Government with its most extensive opportunities for intervention in provincial affairs. Therefore the system of " divided heads " had to be abolished. Since the Montagu-Chelmsford Reforms visualised the working out of responsible government for India primarily in the Provinces, the latter clearly had to start with some measure of autonomy, and this involved the separation of the sources of revenue into two separate groups—those belonging to the Government of India and those belonging to the Provincial Governments. On the other hand, the needs of the Central Government remained, and the abolition of the system of " divided heads " could not be accomplished merely by transferring all provincial resources to the Provinces,

for the sources of revenue which would still remain with the Central Government after the transfer had been made were not sufficient for the latter's needs. Thus the admission of the principle that "divided heads" must be abolished and replaced by a system under which the Government of India and the Provinces would have their own separate sources of revenue brings us up against the crux of the whole problem, namely, what heads of revenue should be left with the Provinces and what with the Central Government respectively.

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It is quite possible that the problem would have arisen even had there been no Montagu-Chelmsford Reforms, for experience had shown that the revenues retained by the Government of India under the old settlements were in some years greatly in excess of their requirements and the resulting surpluses were given to the Provinces in the shape of recurring or non-recurring grants for specific purposes. The Reforms, however, by investing the Provinces with a new dignity, and with functions of the most vital importance, made it clear that no mere make-shift or temporary solutions would suit. The new arrangements had to be comprehensive and laid down on a plan whose main lines would be permanent whatever adjustments and alterations in detail might have to be made under the stress of circumstances and in the light of experience.

A tentative scheme for a financial settlement between the Government of India and the Provinces was sketched in Chapter VIII of the Report on Indian Constitutional Reforms, which was presented to His Majesty's Government in 1918. In that chapter the complete separation of central and provincial revenues and the consequent abolition of "divided heads" were recommended. The scheme also comprised the complete separation of the Central and Provincial budgets and the enlargement of the provincial powers of taxation and borrowing. The greater part of the scheme outlined in the Report on Indian Constitutional Reforms commended itself to the Provincial Governments since it was obviously calculated to increase their financial powers in a number of very important particulars, but, of course, the division of the revenues between the Central Government and the Provinces, with its inevitable corollary of deficit in the Central finances which must

be met by contributions from the provinces, obviously had to be the subject of further enquiry and arrangement between the parties concerned. In section 206 of the 1918 Report, certain exemplar figures are given as an estimate of the anticipated deficit of the Central Government and the contributions to be made by each individual province. The proposed basis on which the contributions were to be fixed was the difference between the gross provincial revenue and the gross provincial expenditure. Other possible bases of settlement had been examined and this had been chosen as being at once the most practicable and the least inequitable. The objections to it are obvious enough, since the provinces with the most liberal scale of expenditure were likely to fare better than those which had been more economical. But this and other objections were considered only to be dismissed. The conditions of the problem were given and the solution stated above was the one offered. The authors of the Report admitted that their scheme would, to some extent, affirm existing inequalities, and all that they could do to mitigate this was to recommend that the whole question should be reinvestigated by the Statutory Commission after ten years' experience of the working of the Reforms. In practice, however, it was found impossible to leave the question at this point, for the proposals aroused strong feeling and vehement opposition throughout India. From Madras, for example, nearly five times as much would be levied as from Bombay, and from the United Provinces nearly five times as much as from Bengal, while the Punjab and Burma would have to contribute far more than other and wealthier provinces. In the first despatch on Indian Constitutional Reforms which the Government of India sent to the Secretary of State in March, 1919, the strong opposition to the above proposals for the financial settlement was reported, and the Government of India stated definitely that they could not justify the permanent retention of the criterion for provincial contributions proposed in the report. The whole question, they said, required skilled investigation, and to this end they proposed that a committee on financial relations between the Central Government and the Provinces should be appointed either by themselves or by the Secretary of State to advise fully upon the subject. This view was endorsed by the Joint Select Committee of Parliament which sat on the Reforms Bill, and, accordingly, a committee consisting of

Lord Meston, Mr. Charles Roberts, and Lieutenant-Commander E. Hilton Young was appointed to enquire into this subject. The committee, which will henceforth be called the Meston Committee, was asked to advise on:

(*a*) the contributions to be paid by the various provinces to the Central Government for the financial year 1921-22,

(*b*) the modifications to be made in the Provincial contributions thereafter with a view to the equitable distributions until there ceases to be an all-India deficit,

(*c*) the future financing of the provincial loans account.

These terms of reference were increased at the instance of the Government of Bombay during the Committee's investigations in India so as to include the question whether the Government of Bombay should retain any share of the revenue derived from the income-tax. The significance of this addition to the terms of reference and its bearing on the subject of provincial contributions will be seen when we examine the reception which was given by the Provinces and the press to the Report of the Meston Committee.

The task of the Committee was in essence to arrange an ideal distribution of the deficit in the central revenues among the provinces, and to fix a standard scale of contributions to which the latter would work up by stages. A certain amount of spadework had been done for them by a conference of financial representatives of the different provinces which had been held in September, 1919. This conference had discussed the normal figures of revenue and expenditure of all the provinces and these were laid before the Meston Committee for review and confirmation or such alteration as its members thought necessary. The Committee first reviewed the proposals put forward in the Report on Indian Constitutional Reforms for the allocation of heads of revenue between the Central Government and the Provinces, and found no reasons to alter them except in one very important particular, namely, the revenue head of general stamps. They reported that the arguments addressed to them on this part of their enquiry related mainly to income-tax and general stamps. Certain local Governments remonstrated against losing a share in these two heads of revenue, because they possessed greater possibilities of expansion

than perhaps any others. The plea for making income-tax receipts a provincial asset was pressed with far greater earnestness in Bombay than elsewhere.

The Committee re-affirmed the view expressed in the Report on Indian Constitutional Reforms that income-tax should be credited entirely to the Central Government. That report pointed out the necessity of maintaining a uniform rate for the tax throughout the country and to the inconveniences, particularly to the commercial world, of having different rates in different provinces. It further laid stress on the case of ramifying enterprises which had their business centre in some big city and did not necessarily pay income-tax in the provinces in which the income was earned. The Meston Committee, indeed, carried the second argument still further and pointed to the case of public companies with shareholders scattered over India and elsewhere, and their decision, therefore, was that income-tax should remain a central receipt. General stamps, however, they found to be in a different case. The Reforms Report had argued in favour of crediting the receipts from general stamps to the Central Government, but the Meston Committee found that this argument had not the same force as those relating to the income-tax. By crediting the receipts from general stamps to the Central Government, and the receipts from Judicial stamps to the Provincial Governments, a divided head was still retained in the financial system, for both general and judicial stamps were controlled by the same agency and there was a good deal of miscellaneous work and outlay common to both. If the "clean cut" between central and provincial revenues, which the authors of the Reforms Report had regarded as imperative, were to be made absolute, then general stamps must be made a provincial receipt, and this, accordingly, the Committee recommended. There were other very strong arguments in favour of this recommendation. The task of the Meston Committee was to assess, if possible, some contributions on each province and yet leave it with a surplus. At the conference of September, 1919, it had been shown that Bengal and Bihar had normally no surplus but a deficit, while the Central Provinces had a surplus so small that no appreciable contribution could be taken from it. The task of the Committee, therefore, in the case of Bengal and Bihar was an impossible one, if the allocation of revenue, made in the Reforms Report, was to be confirmed. But by giving to the provinces the receipts from

general stamps, the task would at least be made possible. Most of the provinces naturally desired to have a growing head of revenue like general stamps, and its transfer would make the assessment of contributions much easier and, as between provinces, less invidious. But on the other hand the adoption of this recommendation would raise the deficit in the central revenues considerably and thus make the process of absorbing it more protracted. In view of the circumstances of India at the time when the Meston Committee was at work, the balance of advantage lay on the whole with the transfer of general stamps to the provinces. The financial settlement under the Reforms had to treat all the latter alike, and the fundamental principles on which the settlement was based forbade the grant of any subvention by the Central Government to any individual province. Clearly the Reforms could not be allowed to start in Bengal and Bihar, and possibly in the Central Provinces also, with a demonstrably inevitable deficit. Therefore, if subventions to individual provinces were barred, no other course was open to the Government of India and to Parliament except to increase the provincial sources of revenue. And yet there are many objections to the provincialisation of general stamps. It is obviously desirable, for example, to have a uniform stamp duty for such instruments as bills of exchange, the articles of association of a company, transfers, shipping orders, share warrants, and so on in a large number of other cases. Even under the present arrangement, it is possible for the Government of India to insist on uniformity of stamp duties for the instruments mentioned above, and in the general economic interests of India, therefore, it might be desirable to reconsider the transfer of general stamps when the financial position of the provinces permits reconsideration.

Apart from the allocation of the income-tax, in regard to which Bombay was the province most interested, the crux of the Meston Committee's problem was provided by the settlement of the contributions which the provinces were to pay to the Central Government. This part of the problem divides into two: first, the initial contributions for the year 1921-22, and secondly, the so-called standard contributions, *i.e.*, the ideal scale on which the provinces should equitably be called upon to contribute until the necessity for the contributions disappeared with the disappearance of the deficit in the central revenues. After carefully considering

the figures provided by the conference of September, 1919, and receiving representations the committee fixed the total sum which the provinces were required to contribute at 9,83 lakhs. After exhaustive consideration of the problems involved in the taxation of the initial contributions from the provinces, the Meston Committee decided that the fairest method of assessment was on the "Windfall" principle, that is, the Committee worked out the net increase in the total income, including general stamps, of all the provinces taken together, at the figure of 18,50 lakhs. This represented the amount which the provinces gained and the Central Government lost in the redistribution, and the Committee maintained that it was only reasonable that the provinces should forego some of this increased spending power in favour of the Central Government. Accordingly, they pressed to assess the initial contributions on this increase of spending power in the provinces in such a way as to leave each province a surplus to enable the new councils to be inaugurated without the necessity of resorting to fresh taxation. But even after they had adopted the "Windfall" principle, the Meston Committee found it no easy matter to settle the initial contributions. At first they considered the possibility of levying an even rate on the increase in spending power of all the Provinces, but they saw that even this apparently equitable arrangement would, in view of the unequal financial strength of the Provinces, cause hardship in some cases. Each province had to be considered on its merits, and the Committee drew up the following table which represents their proposed allotment of initial contributions to be paid by the provinces:—

Provinces.	In Lakhs.		
	Increased spending powers under new distribution of revenue.	Contributions as recommended by the Committee.	Increased spending powers left after contributions are paid.
Madras	5,76	3,48	2,28
Bombay	93	56	37
Bengal	1,04	63	41
United Provinces	3,97	2,40	1,57
Punjab	2,89	1,75	1,14
Burma	2,46	64	1,82
Bihar and Orissa	51	*Nil*	51
Central Provinces	52	22	30
Assam	42	15	27
	18,50	9,83	8,67

Naturally this settlement did not please everybody and indeed, it pleased very few. A predominantly agricultural province like the Punjab gained appreciably by having the whole of the land revenue instead of only a portion as hitherto, but provinces like Bengal and Bombay, with considerable industries, were in a far less happy position. They provided the bulk of the Indian revenue from Income-Tax and yet they could not hope for any share of it. Madras, too, had special cause for complaint against the settlement. By far the heaviest initial contribution, namely, 3,48 lakhs, was demanded from her and her people, and the Madras Government felt this sacrifice all the more keenly since, if their standard of public expenditure had not been kept by them in the past at a comparatively moderate figure, their windfall under the reformed system of finance would not have been so great, nor consequently would their contribution. Bengal and Bombay, on the other hand, complained that they were now faced with the necessity either of reducing their standard of public expenditure or else of running into debt—a process which the Government of India was not likely to allow to proceed too far. However, the Government of India under the stress of its own over-riding necessity had no alternative but to adhere to the Meston Award, and so the Reforms opened with what some of the provinces regarded as a crippling levy on their revenues. The Joint Select Committee of Parliament, however, made certain modifications in the Meston proposals. The scheme of standard contributions was rejected, and it was pointed out that the provincial contributions should be wiped out at the earliest possible moment. Further, they directed that the provinces should be given a small share in the growth of income-tax. It must be admitted that the years immediately following the Meston Settlement brought little happiness to the provincial financial departments, but it must also be admitted that the payment of provincial contributions was only one contributory cause of this. India, like every other belligerent country, had had to divert her energies to the prosecution of the war, and therefore during these early post-war years there was much reconstruction and development work to be done. The greater part of this now fell to the lot of the Provincial Governments, which also had to incur large expenditure in increasing salaries to meet the increased cost of living and in adding new staffs and new departments in accordance with the expansion of

their activities and responsibilities. Thus the years following 1920 were years of financial leanness for the provinces as well as for the Government of India, and the circumstances of these years were such as to force the provinces into heavy expenditure, whilst leaving their revenues comparatively inelastic. Thus, Provincial Governments were forced to look for relief primarily to the remission of the provincial contributions, and the record of debates in the Central and Provincial Legislatures, and the output of newspaper articles and platform oratory shows how strongly the demand for remission was pressed during the years immediately succeeding the Meston Award.

According to the plan laid down for the abolition of provincial contributions certain provinces have priority over other provinces in the matter of remissions. The Meston Committee gave Madras, the United Provinces, the Punjab and Burma the first claim on remissions, and not until almost half of the total contributions had been remitted could any other province claim any relief. From that point onwards, however, every province in India was to share in a prescribed measure in any relief accorded by the Government of India until the contributions were altogether abolished. It was in his budget speech for 1925-26 that Sir Basil Blackett, after showing a surplus of 3,24 lakhs of rupees, made the welcome announcement that he proposed to employ Rs. 2,50 lakhs of this surplus in the permanent remission of provincial contributions. By this first remission, therefore, Madras received 1,26 lakhs of rupees, the Punjab 61 lakhs, the United Provinces 56 lakhs and Burma 7 lakhs. In the next Budget Statement, that for 1926-27, Sir Basil Blackett announced that a further sum of 1,25 lakhs would be permanently remitted to the same provinces and accordingly, of the 1,25 lakhs, 57 lakhs went to Madras, 33 to the United Provinces, 28 to the Punjab and 7 again to Burma. The next year again, in his budget speech delivered in the Legislative Assembly on February 28th, 1927, Sir Basil Blackett announced a net recurrent surplus of 3,64 lakhs. Again he decided that the most urgent claimant for the surplus was the remission of provincial contributions. The surplus was less by 1,81 lakhs than the amount required to make a clean sweep of provincial contributions. But an appeal for help had been received from Bombay, and as it was inexpedient to favour one province at the expense of others the Government of India had decided to divert a portion

of the current year's realised surplus from the usual debt redemption to the remission of all outstanding provincial contributions for the year 1927-28 only. The end of provincial contributions came with the budget for 1928-29, when Sir Basil Blackett announced that the portion of the contributions which he had remitted temporarily for 1927-28 would henceforth be permanently remitted. The section of the budget speech which announces the permanent extinction of provincial contributions occupies only 12 lines in the printed report, and thus curtly and inconspicuously was accomplished one of the greatest triumphs of the reformed system of government in India which to-day can be read in terms of hospitals, schools, dispensaries, wells and many other human necessities which it is the duty of every Provincial Government to provide for its people.

* * *

Let us turn now to the existing financial arrangements, other than those dependent on the Meston Award, between the Central and Provincial Governments in India. Under the pre-Reform order of things, the Secretary of State exercised a much closer control over Indian finances and expenditure than he does to-day. As at present, he prescribed limits of expenditure beyond which his specific sanction was necessary. As those limits were comparatively narrow, the arrangement entailed his intervention in a variety of matters, many of them unimportant or, even, the concern primarily of semi-official local bodies such as municipalities. The Reforms changed all this and bestowed wider powers of expenditure on the Provincial Governments. On the "transferred" side these were necessarily less restricted than on the "reserved" side, for dyarchy involved a radical alteration of the system of government and the surrender of complete authority over "transferred" subjects, expenditure on which is now controlled by the provincial legislatures. The Secretary of State in Council has, however, reserved to himself the control of expenditure likely to affect the all-India Services and still exercises some control over the purchase of military stores in the United Kingdom. On the "reserved" side, on the other hand, much less latitude is allowed, the power to sanction expenditure being subject to certain limits.

* * *

The Government of India also received wider financial power under the Reforms scheme, but as the dyarchical system was not extended to it, the changes were of degree, not of kind. The Secretary of State still approves of the Central Government's budget before it is presented to the Legislative Assembly, still sanctions new taxation, and still controls borrowings outside India, the gold reserve, the paper currency, the exchange policy, the pay, allowances and conditions of service of the all-India Services, and a host of other such matters.

* * *

The provinces now exercise practically full control over their own sources of revenue, namely the provincial balances, receipts from provincial subjects, provincial taxation (the power to impose which has been much enhanced by the Reforms), proceeds from loans and recoveries from loans, and, finally, a share of the income-tax realised in the province. Thus practically the entire revenues of a province are available for use on provincial subjects; but Provincial Governments are under obligation to repay amounts previously borrowed from the Government of India, to pay interest on capital expenditure previously incurred by the latter on irrigation works in the province, and to build up, by annual savings, a Famine Relief Fund.

Provincial Governments are free to draw on the first of these sources of revenue provided they give the Central Government notice at the beginning of the year. The latter may also, in an emergency, temporarily restrict the amount to be withdrawn. The power to impose provincial taxation has been much enhanced under the Reforms, but is subject to the previous sanction of the Government of India in certain cases. Also, whereas in pre-Reform days, Provincial Governments were not allowed to borrow in the open market, and were discouraged from borrowing otherwise, their enhanced control over provincial subjects, especially on the "transferred" side, has led to material alteration in this policy. Provincial Governments are now empowered (subject to the Secretary of State's sanction to loans raised outside India and that of the Governor-General-in-Council to loans raised inside India) to raise money in the open market "on behalf of and in the name of the Secretary of State in Council" on the security of their own revenues for certain purposes and subject to certain conditions. In addition, they obtain loans from the Provincial

Loans Fund, established by the Central Government with effect from 1st April, 1925, all the Provincial Government's liabilities on that date being transferred to it.

* * *

With the lessening of the Secretary of State's and the Government of India's financial control of the provinces has come greater control over the Executive (including the Ministers) by the Legislature. The former's proposals for expenditure are presented to the latter as demands for grants. These are considered and voted upon by the Legislative Council and may be accepted, curtailed, or rejected, but, following the English practice, the Legislature may not increase a grant or change its object. The Council's power over expenditure is restricted to " voted " heads, it having no control over contributions payable to central revenues, charges on loans, expenditure prescribed by law, the salaries and pensions of officers appointed by or with the approval of His Majesty or by the Secretary of State, the salaries of High Court Judges, and, in some provinces, expenditure on " backward tracts ". The Governor may, however, certify and demand as essential to the discharge of his responsibility if the demand relates to a reserved subject, and he has power in cases of emergency to authorise such expenditure as may be in his opinion necessary for the safety or tranquillity of his province or for the carrying on of any department.

In addition to the control of provincial expenditure by the Legislative Council, certain responsibilities in the same direction are exercised by the Finance Department of each province. The provincial Finance Department is the custodian of the Famine Relief Fund and must watch the provincial balances and advise on all important financial questions, such as proposals for new loans or taxation, the grant of new rights, assignments of land revenue, schemes for fresh expenditure and the creation or abolition of posts, and changes in their emoluments. It also prepares the budget, lays the Audit Appropriation Report before the Public Accounts Committee, and brings irregularities to its notice and ensures that audit is effective. All this constitutes very adequate machinery for apprising the legislature of the improper use of provincial revenues.

* * *

The provinces have benefited in several ways from the improvement in the Central Government's financial position, particularly in respect of their borrowings. A Provincial Loans Fund has been established, from which large sums can be borrowed by the provinces on comparatively easy terms. The terms, moreover, are such that the interests of creditors are not jeopardised and preference is given to the more deserving of the objects for which money is requisitioned. The provinces are thus afforded facilities for undertaking the schemes of development which they have most at heart. The subject of interest on loans has occupied a good deal of attention since the Reforms. A longstanding grievance of the provinces was that though they were charged interest when they overdrew their balances with the Government of India they were allowed no interest when they had credit balances. This grievance has now been removed and provinces pay no interest on overdrawals during the financial year but only on those outstanding at its termination, which are then regarded as loans. Another development is that Provincial Governments may place money in fixed deposit with the Government of India and receive interest thereon. Similar adjustments have been effected in several other matters between the Central and Provincial Governments. As the assignments made yearly to the latter on account of the sale proceeds of unified postage and revenue stamps were found to be increasingly inadequate they were suitably increased in 1924.

* * *

The possibility of separating central and provincial banking accounts has often been mooted, but as this is a matter in which it is necessary to move with all possible caution its settlement has been postponed. Experiments have, however, been undertaken in the United Provinces in the separation of audit from accounts, the former remaining the business of the Central Government and the latter being entrusted to the Provincial Government. These experiments were initiated in two departments only, Education and Police, but as they gave satisfactory results they were extended to all departments in April, 1926.

* * *

From the foregoing sketch it will be seen that if the position is reviewed over a number of years it is clear that, despite

financial stringency, serious economic dislocation, and heavy expenditure, the country as a whole has been steered gradually into an enviable state of prosperity, and practically all the provinces have passed through their worst financial crises. Economic condition has improved in stability, and the prospect is more hopeful everywhere. For this a good deal of credit must be given to the adjustments which have taken place during the past few years in the financial relation between the Central and Provincial Governments.

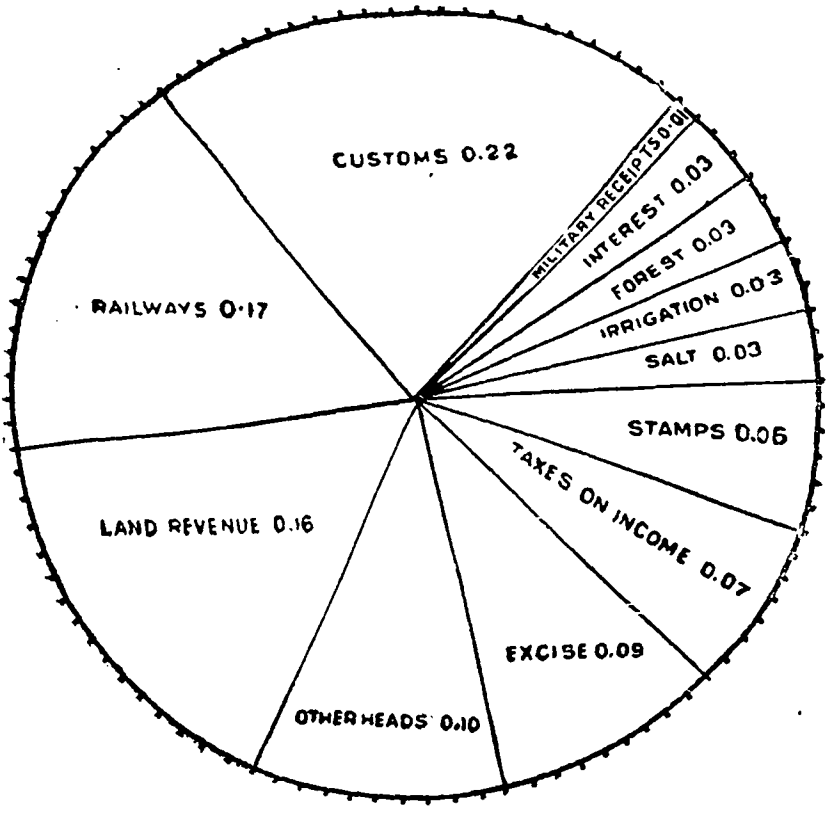
* * *

Before discussing the year's finances we may point out that in India two annual budgets, the Railway Budget and the General Budget, are presented to the Central Legislature. The separation of railway finance from the general finances of India sprang, in the first place, from the fact, forcibly pointed out by the Committee under Sir William Acworth which investigated the Indian Railway system, that the annual allotments for railway expenditure were determined from year to year with less regard to actual railway requirements than to the general financial position of India. The unhappy results of this arrangement from the railway standpoint were very clearly demonstrated in the Acworth Report. After investigating the matter fully, the Government of India came to the conclusion that the suggested separation would enable the railways of India to be financed as a business undertaking, and would also relieve the Government of many difficulties and doubts. When the general budget incorporated the gross receipts and working expenses of the railways, the difference between good and bad trading seasons and good and bad monsoons meant a difference of several crores of rupees in the budget figures. Accordingly a scheme was devised separating railway finance from the general finances of India and ensuring to the latter a definite annual contribution from railways which was to be the first charge on their net receipts. What was left of the profits after payment of this contribution was to be placed to railway reserves on the condition that if the amount available for transfer to the reserves should exceed in any year Rs. 3 crores, one-third of the excess should be paid to general revenues. This railway reserve is to be used to secure the payment of the annual contribution, to provide, if necessary, for arrears of depreciation and for writing

DIAGRAM.

How each Rupee of Revenue was made up in India 1927-28.

(Provincial and Central together.)



The Rupee of Revenue 1927-28.

[The basis of reckoning is the same as that on which the accounts and estimates are prepared; working expenses of the Railway, Irrigation, Posts and Telegraphs Departments, refunds and the like being deducted from revenue and not treated as expenditure.]

down and writing off capital, and to strengthen generally the financial position of the railways. The effect of this arrangement upon the finances of the country is that the Indian tax-payer is now assured of a regular and growing contribution in relief of taxation from his investments in railways; while the task of maintaining a continuous financial policy and of distinguishing between a temporary and permanent surplus or deficit in accounts is immensely facilitated.

* * *

Having prepared the way for an examination of the finances of the year we can now turn to the Railway Budget for 1929-30, presented by Sir George Rainy, Commerce Member of the Viceroy's Council, in the Legislative Assembly on the 19th February, 1929. The Budget disclosed a continuance of the prosperity that has characterised Indian Railway administration for several years past. In spite of the failure of the monsoon in parts of the United Provinces and the Punjab, and strikes and upheavals in the Bombay Presidency, the traffic receipts in 1928-29 were considerably in excess of those of the previous year. The anticipated surplus in 1927-28 of a little over Rs. 11 crores on the year's workings was almost realised, the actual surplus being about 24 lakhs less.

Dealing with the revised estimates for 1928-29 Sir George Rainy announced that the traffic in almost all classes of commodities had risen, and the quantity of goods transported was likely to increase by nearly 4 per cent. The traffic variations during the year showed no new features of interest except the result of the reductions in rates and fares made during the previous year. Those reductions were estimated to lead to a decline of Rs. 21 lakhs in passenger earnings, but actually the earnings were only Rs. 7 lakhs less and though the number of passengers carried was less by 4 millions during the first seven months of the year the passenger miles increased by 49 millions, which means that the average journey travelled was longer. The working expenses were expected to be about Rs. 2 crores higher and in excess of the actuals of 1927-28 by Rs. $1\frac{1}{3}$ crores. About three-fifths of this excess is due to abnormal causes. The payment of special gratuities to the staff dispensed with on reduction of establishments in the workshops of the South Indian and Bombay, Baroda and Central India Railway Companies is responsible for 35 lakhs, and a further Rs. 46

lakhs of the excess was due to special adjustments in the accounts of the Great Indian Peninsula Railway. The remaining increase in working expenses is merely the natural result of the additional miles of line to be staffed and the larger volume of traffic carried.

Summarizing the financial results of the current year Sir George Rainy said: " The total receipts of the Commercial lines we put at Rs. 105¾ crores, which is nearly 2 crores higher than the receipts for the previous year. The total expenditure at Rs. 95 crores is up by Rs. 3⅔ crores, but of this sum more than Rs. 2 crores is accounted for by the increase in interest charges. The surplus of receipts over expenditure on the commercial lines is Rs. 10¾ crores against 12½ crores in 1927-28. Out of this surplus the loss on the strategic lines absorbs 1¾ crores, and of the balance Rs. 5½ crores goes to general revenues under the operation of the Convention and Rs. 3½ crores will be added to the Reserve Fund."

Announcing a reduction in rates and fares Sir George Rainy said: " Actually our financial position seems to us strong enough to justify four measures. There will be reductions in the rates for forest produce, such as timber, firewood and charcoal, on the Eastern Bengal and Great Indian Peninsula Railways, and substantial reductions will be made on three of the State-managed railways in the rates for fresh fruit and vegetables. After making allowance for the growth in traffic which is expected, the net loss in earnings is put at Rs. 7 lakhs for those two proposals together.

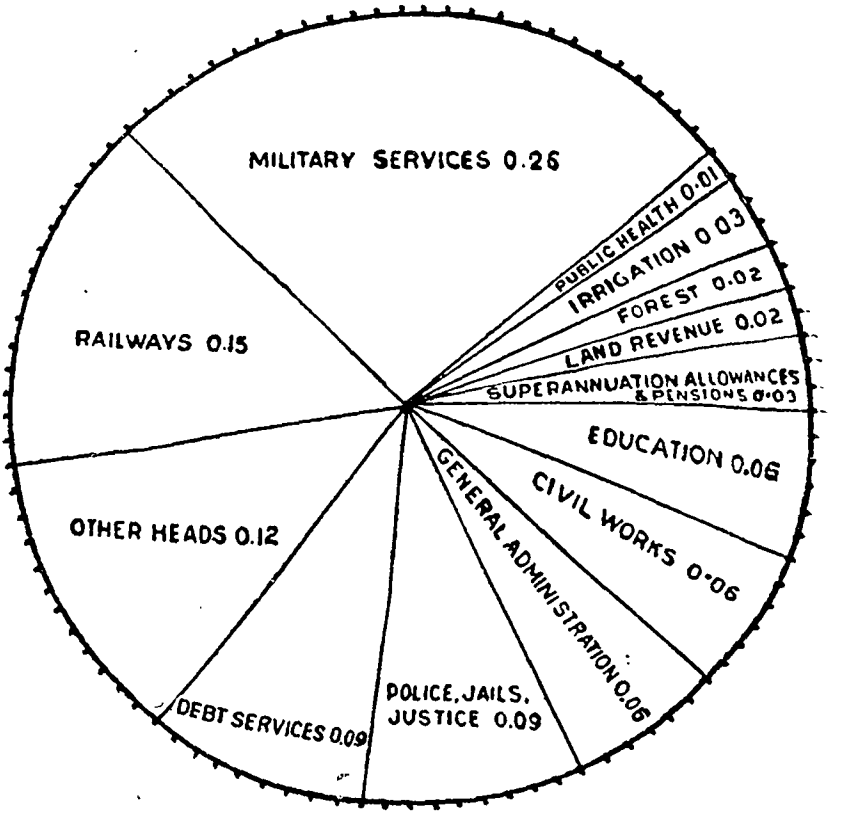
When the long distance fares on three of the State-managed railways were reduced last year, no change was made in the third class fares on the Eastern Bengal Railway, which remained at their present level of 3½ pies per mile for all distances. It has been decided to introduce on this railway a telescopic scale, the existing rate being retained for distances up to 150 miles, while for longer distances the rate will be reduced to 2½ pies per mile from 151 to 300 miles, and 1½ pies per mile for distances over 300 miles. It is believed that these reductions will stimulate passenger traffic appreciably, and allowance being made for that, the loss in earnings is estimated to be Rs. 5 lakhs a year.

The other important reduction is in the rates for coal. The last reduction in our coal rates was made in 1926, and the results have been such as to encourage us to take another step in the same direction. On the East Indian Railway the tonnage carried

DIAGRAM.

How each Rupee of Expenditure was made up in India 1927-28.

(Provincial and Central together.)



The Rupee of Expenditure 1927-28.

[The basis of reckoning is the same as that on which the accounts and estimates are prepared; working expenses of the Railway, Irrigation, Posts and Telegraphs Departments, refunds and the like being deducted from revenue and not treated as expenditure.]

for distances over 400 miles was 31 per cent. more in 1927-28 than it was two years earlier, and the earnings 33 per cent. more. It is a very significant fact that the earnings on the long distance public coal should show a greater increase than the tonnage, notwithstanding the reduction in charges, for it means that the average distance the coal was hauled must have increased substantially. The present rates for distances over 400 miles are calculated on the following telescopic scale, the rates being given in pies per maund per hundred miles:

15 pies for the first 200 miles.

7 pies for the next 300 miles.

6 pies for the portion of the journey in excess of 500 miles.

The new scale which we are about to introduce makes no change in the rate for the first 200 miles, but reduces the rate to 6 pies per 100 miles, from 201 to 400 miles, and to 5 pies per 100 miles for the portion of the journey in excess of 400 miles. I have had the new rates compared with the rates charged in 1913-14 to a number of centres, and I find that the increase over the pre-war rates varies from 8 per cent. in the case of Amritsar and Karachi, to 9 per cent. in the case of Delhi and Ahmedabad, 10 per cent. in the case of Bombay and Madras and 12 per cent. in the case of Cawnpore. I have every hope that the reductions will stimulate the traffic in long distance coal, and that it will do something to promote the development of industries in areas remote from the coalfields. The reduction in gross earnings, due to the lower rates for coal, is estimated to be Rs. 53 lakhs, but there will be a substantial set-off owing to the saving in the freight paid by railways for the conveyance of the coal they use."

Sir George Rainy next discussed the Railway Budget estimates for 1929-30, in which he said that the total receipts were put at Rs. 107⅓ crores, and expenditure slightly over 96 crores, producing a net gain from the Commercial lines of 11¼ crores. After setting aside 1¾ crores to meet the estimated loss on strategic lines and putting 6¼ crores to general revenues 3¼ crores will go to the Railway Reserve Fund. As regards capital expenditure during 1928-29, Sir George said that Rs. 28 crores had been set aside for those charges which include Rs. 4 crores as the purchase price of the Burma Railways, which were taken over by the State

on the 1st January, 1929, at the desire of the Burma Government and the Burma Legislative Council.

Referring to new construction in 1929-30 Sir George Rainy said: "The allotment for 1929-30 is Rs. 8⅓ crores. Much the greater part of this sum will be devoted to the completion of the new lines already under construction, and the allotment for new lines to be commenced during the year has been kept down to Rs. 35 lakhs.

It is expected that about 600 miles of new lines will be opened during 1929-30, leaving 2,100 miles under construction at the end of the year. The lines likely to be opened include 83 miles of the Raipur-Parvatipur line, which is to connect the Central Provinces with the new port at Vizagapatam, and about 127 miles of lines under construction by the Burma Railways. Of the entirely new projects much the most important is the Dacca-Aricha line in Eastern Bengal, which is expected to cost about Rs. 2 crores. A sum of Rs. 27 lakhs has been allotted for the commencement of this line in the estimates for next year."

Thereafter the main theme of Sir George Rainy's Budget Speech was a plea for the appointment of an additional member of the Railway Board, this officer to devote his whole time to Labour and Establishment questions. The Standing Finance Committee for Railways had previously rejected this proposal, but Sir George Rainy made a very convincing appeal for the sanction of the new appointment, and in view of the fact that railway employees in India now number nearly a million and that during the year with which this report deals there has been unprecedented unrest on the railways the proposal was by no means as unreasonable as the opposition tried to make it appear. After some considerable discussion in the Assembly the appointment of a fifth Member of the Railway Board was agreed to, and Mr. A. M. Hayman, O.B.E., was appointed to the post.

* * *

In November, 1928, after an interregnum of 7 months during which the portfolio of Finance was held by the Hon'ble Sir Bhupendranath Mitra, K.C.S.I., K.C.I.E., C.B.E. (whose permanent portfolio was that of Industries and Labour) Sir Basil Blackett was succeeded as Finance Member by Sir George Ernest Schuster, K.C.M.G., C.B.E., M.C. In presenting his first Budget

to the Legislative Assembly in February, 1929, Sir George Schuster made a specially full and careful survey of the financial events of the preceding year and of the prospects lying immediately before him. For an official account of the financial situation of the period under report in this volume it would be impossible to improve upon Sir George Schuster's Budget Speech, and this is accordingly reproduced below practically *verbatim*.

"I think I can most fairly describe general conditions in the financial year which is now drawing to a close by saying that they have been bad in patches, but that it would be a mistake to assess the general position from a contemplation of these bad patches, and to say that, viewed as a whole, it gives ground for serious pessimism. During the months of June to September the monsoon was on the whole fairly active except in parts of Northern India, where a marked drought was experienced and just in these areas the recent exceptional cold wave and frost have produced serious losses of crops in certain localities. It is difficult as yet to estimate how far these will have any general effect on the balance of trade and the ways and means position. But these factors certainly give ground for caution in making revenue forecasts. The year was also disturbed by prolonged strikes in various parts of the country, and particularly in the cotton mill industry of Bombay. In spite of all this, the trade statistics so far available are, on the whole, encouraging. The visible balance of trade, including private imports of treasure, for the nine months ended the 31st December, 1928, was in favour of India by 39·77 crores against 33·07 crores in 1927 and 22·55 crores in 1926. Exports of Indian merchandise show an improvement of over 10 crores as compared with 1927. It is particularly satisfactory to observe that the exports of cotton have risen from 28 to 43½ crores, while those of jute and jute manufactures and of seeds also record an improvement of 5 crores and 3¼ crores respectively. Exports of rice, however, have gone down by as much as 7 crores, as a result mainly of Japan's temporary prohibition of imports of the commodity into that country and of the increasing competition of the rice-producing countries on the Mediterranean sea board. Wheat has been seriously affected by unfavourable climatic conditions, so much so that considerable quantities have had to be imported, while exports have fallen by about 2¾ crores.

The imports as a whole show a fall of about a crore—the result of a drop in cotton and cotton-yarn and manufactures, counter-balanced to a large extent by a rise in the imports of grain, machinery and vehicles. The two items last mentioned are particularly interesting. Imports of machinery show a rise of about 16 per cent. for which the recent abolition of duty is, no doubt, largely responsible. The number of motor-cars and commercial motor vehicles which came into the country during the nine months, also shows an improvement of as much as 38 per cent., although the amount of duty collected is still slightly less than the figure for 1926. I have every hope that the leeway will be made up and that our customs revenue will soon begin to benefit more largely from this source. Prices in general continued to remain fairly stable.

Money conditions have at times been difficult, and in the last weeks have been affected by world conditions which themselves have been largely governed by the situation in the United States. The enormous volume of speculation there has tended to force up rates for money in all countries engaged in internal trade, and this is the root cause to which the recent rise in the bank rate of the Imperial Bank to 8 per cent. must be attributed. I do not wish to enter into any detailed disquisitions on this subject now, but I would call attention to one point only which seems to have missed the attention of those who have criticised this action. It has been said that it was normally understood that the rate would not rise to 8 per cent. until expansion of currency against commercial bills had reached its full limit of 12 crores, and that, in the recent case, the rate was raised after only 9 crores of expansion had taken place. It must, however, be remembered that this year Government had expanded currency to the extent of 1 crore against sterling and 1 crore against created securities, and that there had been a further expansion of 2·4 crores against imported gold, so that the total expansion had really been well over 13 crores.

The net customs receipts for the year were taken at 50·18 crores, and I now put the revised estimate at 20 lakhs less. Larger imports of sugar and of mineral oils have increased the receipts by 70 lakhs and 28 lakhs respectively, while the land customs collections show an improvement of 70 lakhs, including the 40 lakhs thrown forward from last year. Excise duty on motor spirit is

also expected to yield an additional 29 lakhs. On the other hand, cotton piece-goods and protective special duties relating to iron and steel show a deterioration of 40 lakhs and 42 lakhs respectively, while matches, the export duty on rice, and the excise duty on kerosene have all been on the downward grade.

I have taken the revised estimate under Taxes on Income at 16½ crores against the budget figure of 17 crores. The reduction is mainly accounted for by certain large refunds which have had to be made as a result of legal decisions.

Owing to an unexpected and considerable amount of speculation at Sambhar, the estimate of salt revenue, which was originally taken at 7 crores, will probably be exceeded by about 65 lakhs in the current year. But as I do not think it safe to calculate on an average revenue of more than 7 crores, I am forced to treat the extra 65 lakhs which we expect to collect in the current year, as being gained at the expense of next year, the estimate for which must be reduced accordingly. This unexpected factor seriously disturbs the distribution of revenue as between the current year and next year, and I shall have to refer to this point again.

The only item which needs comment is that of interest receipts, which shows an improvement of as much as 66 lakhs, but this should really be set against a counterbalancing increase in interest payments to which I shall presently refer.

The gross payments on account of interest on ordinary debt have exceeded the budget figure by 1,33 lakhs as a result mainly of the larger magnitude of our borrowing operations and a small increase in our borrowing rate. But the net payments, after deducting recoveries from the Commercial Departments and the Provincial Loans Fund, show a deterioration of 65 lakhs only, which as I have already stated is covered by the increase in interest receipts. I would take this opportunity of explaining to the House that the net payments would have been considerably larger but for a change which I have introduced in the method of calculating the interest chargeable to Commercial Departments in respect of capital outlay incurred after the 31st March, 1917, whereby they are required to share the loss which the general revenues suffer through the tax-free concession attached to certain portions of our rupee debt. This alteration has increased the recoveries from the Railways to the extent of 59 lakhs under this head, although

it has had the simultaneous effect of reducing the railway contribution otherwise receivable by about 20 lakhs. The former method of calculation was really erroneous, as it meant that Government did not actually recover from the Commercial Departments the interest which they were in effect themselves paying. It is reassuring to know that in spite of the additional payment which the correction of this error involves, the actual rate of interest to be paid by the Commercial Departments for the forthcoming year will be less than it was two years ago. For 1926-27 the rate was 5·43 per cent., for 1927-28, 5·38 per cent., and for 1929-30 it will be 5·32 per cent.

The only important variations from the original estimate are a saving of 22 lakhs in opium expenditure, which has resulted from short deliveries and poorer outturn, and another of 21 lakhs under Civil Administration, which includes 7 lakhs on account of a carry-forward of the expenditure on India House to next year.

As the House is already aware, the railway contribution is now estimated at 5·46 crores, which is only a little less than the budget figure of 5·48 crores. The present estimate includes 23 lakhs, being one-third of the excess over 3 crores available for transfer to the Railway Reserve Fund.

The working of the Indian Posts and Telegraphs Department is now expected to show a loss of 29 lakhs, which is very disappointing considering that a year ago it was expected that a surplus of a few thousands would accrue. The deterioration is mainly accounted for by the facts that the reduction in the rate for foreign telegrams has not been counterbalanced by a corresponding growth in traffic, and that the effect of the numerous revisions of pay and other concessions granted to the staff in recent years was, to some extent, under-estimated. The Indo-European Telegraph Department does not show any appreciable variation on the whole, and will involve a loss of about 7½ lakhs.

The net military expenditure has been taken at 55·10 crores as in the original budget. I shall give a fuller explanation of the military expenditure item when dealing with the budget estimates for 1929-30.

The main variations may now be summarised as follows:—

	(In lakhs of rupees.) Better.	Worse.
Revenue from Customs	...	20
Revenue from Taxes on Income	...	20
Revenue from Salt	65	...
Revenue from Interest	66	...
Expenditure on account of Opium	22	
Expenditure on account of Interest on Debt	...	65
Expenditure on Civil Administration	21	...
Loss on the working of the Posts and Telegraphs Department	...	29
Other heads	15	...
Total	1,89	1,64
Net	25	

We thus expect to close the accounts for 1928-29 with a surplus of 30 lakhs instead of 5 lakhs previously estimated, and I propose that this sum should be credited to the Revenue Reserve Fund, the balance to the credit of which will then stand at 1,04 lakhs.

I must preface my detailed account of the budget proposals for 1929-30 with certain preliminary explanations. For a proper understanding of the present position, I think one must go back to the remission of the provincial contributions which really became effective from the beginning of 1927-28, and one must consider the three years 1927-28, 1928-29 and 1929-30 together.

The way in which I would present the picture is this. As Hon'ble Members will recollect, the actual result for the year 1926-27 showed a surplus amounting to 2,96 lakhs, and on the strength of this it was decided to remit (provisionally in the first place) the whole of the remaining provincial contributions, amounting to 2,58 lakhs per annum. It was recognised that if Government sacrificed this permanent revenue, there might at the outset be a deficit, but the intention was that the surplus of 2,96 lakhs in 1926-27, which was transferred to a special Revenue Reserve Fund, would provide a sufficient sum to bridge the gap until the normal growth of revenue had built up receipts to the requisite level. It was thought that the gap would not continue for more than one year, and that by 1928-29 equilibrium would have been attained. On the revised estimates for 1928-29, which I have just dealt with, it might be said that this exception has

been fulfilled; but on a closer examination, it will be seen that the figures for 1928-29, taken by themselves, are really misleading. In fact, the revenue for 1928-29 has been fortuitously increased at the expense both of 1927-28 and of 1929-30. As I have already explained, it so happened that 40 lakhs of customs revenue which ought to have been received in 1927-28 were actually received only after the close of that year, and were thus credited to 1928-29. Further, as I have also already explained, owing to speculation in salt, the revenue from that source for 1928-29 is likely to receive 65 lakhs which, in normal circumstances, would not have been received until after the close of the year and thus properly belongs to 1929-30. If, therefore, the true nature of the results for 1928-29 is revealed, it will be seen that, eliminating these two exceptional items totalling 1,05 lakhs, the year would have closed not with a surplus of 30 lakhs, as our revised estimates show, but with a deficit of 75 lakhs. The gap left by the remission of the provincial contributions had not therefore really been filled in 1928-29, and the question which I have had to ask myself in settling the policy for the forthcoming year is whether the time has now come to decide that the original expectation cannot be realised, and that it will be necessary to find some new source of revenue. To answer this question we have to take account both of the revenue and expenditure sides, for it would be impossible to say that the gap had been satisfactorily filled if that could only be done at the cost of cutting out all items of beneficial expenditure which are really essential if the needs of the country are to be met.

What then is the answer to this question? Will it be necessary to impose new taxation now?

Sir, I believe it has been sometimes customary to keep the secret of the budget proposals as regards taxation till the closing paragraphs of the speech, so as to maintain the minds of Hon'ble Members on the tip-toe of expectation till the end, and thus avoid the natural tendency to sleep which a dreary recital of figures is apt to stimulate. I do not propose to have recourse to those adventitious aids for maintaining your attention. I will reveal my secret at once. The sum and substances of the position as regards normal revenue and expenditure, which it will be my business now to describe to you in greater detail, is that we can make both ends meet in 1929-30 without recourse to increased taxation and without

denying money to any urgent beneficial expenditure, provided that we use the Revenue Reserve Fund, first, to correct the artificial disturbance in the normal course of receipts from salt revenue, and, secondly, to meet certain special items of expenditure of a non-recurring nature.

I have decided to recommend this course for several reasons:

First, I do not think that it would be justifiable to impose new taxation until it is more clearly demonstrated that there is a permanent need for it. With reasonably favourable conditions, some of our normal sources of revenue should be capable of considerable expansion, and I think it is fair to give the plan on which the remission of provincial contributions was undertaken the chance of another year in which to achieve its realisation.

Secondly, before imposing new taxation, I want to have a fuller opportunity of reviewing the expenditure side of the budget than has been possible in the limited time since I took over office.

Thirdly, before imposing new taxation if that should prove necessary, I want to have ample opportunity for studying conditions throughout the country, so that I may be able to formulate proposals in the light of full knowledge of facts and opinions in such a way as to ensure that whatever is done is done in a way most beneficial to this country's interests.

But I wish to leave Honourable Members in no misapprehension on this matter. If additional taxation proves to be necessary in the following year the need will have to be boldly faced. My present action is governed not by any fear of doing this, but by the desire to defer taking any step until I am quite certain, first, that it is necessary; and, secondly, what is the best direction in which to take it.

Having thus told you the general plan of the budget, I must explain in detail how the various pieces in the puzzle are to be fitted in.

Any comparisons which I make will be throughout with the revised estimates for 1928-29. In view of the abnormally large imports of sugar during the current year, it would not be safe to place the estimate of revenue from that source at more than 7 crores, which, in present conditions, may be considered a normal figure. This means a deterioration of 80 lakhs under this head

alone. Further, the land customs figure will also show a reduction of 36 lakhs owing to the disappearance of the special factor which increased the revised estimate this year. On the other hand, I am budgeting for appreciable improvements under cotton piece-goods, protective special duties, excise duty on motor spirit, etc. On the whole I have assumed an improvement of 40 lakhs.

I have taken the estimate for next year at 16·60 crores—an improvement of only 10 lakhs. Owing to the absence of the specially large refunds, which were the main causes of the deterioration in the current year, the figure should actually have been appreciably larger, but I have had to allow for the effect of the industrial strikes, particularly in Bombay and at Jamshedpur, which will make itself felt on the next year's collections.

As I have already indicated, the element of speculation which has brought in a windfall of 65 lakhs in the current year will lead to a corresponding reduction in the next, and I have therefore assumed a receipt of 6·35 crores only as compared with 7·65 for the current year.

As the House is aware, the revenue from opium is gradually diminishing as a result of the Government of India's self-denying policy whereby exports of provision opium are to be extinguished not later than 1935. We shall accordingly lose 42 lakhs next year under this head.

The only item which shows any important variation is that relating to currency receipts, which are expected to go up by 36 lakhs. This, of course, merely means that we get back a portion of the rather high expenditure in the current year under Interest on Debt.

The net payments of interest on ordinary debt show a reduction of 1,33 lakhs, accounted for mainly by larger recoveries from Commercial Departments and from the Provincial Loans Fund. On the other hand, there is an increase in the charges for interest on other obligations of 95 lakhs, and an increased provision of 34 lakhs under Reduction or Avoidance of Debt. The latter includes the normal increase due to the increase of debt itself and also a larger sum for Reparation payments to which I shall refer again. As regards the other heading, namely, Interest on other Obligations, 50 lakhs of the increase represents growth in the provision for bonus on cash certificates, and as Government's liability in regard

to these certificates was made a subject of keen interest in last year's budget debates, I propose to go to some length now in explaining the position. The total provision to cover the bonus on the discharge of certificates which we anticipate for next year, is 1,10 lakhs, against a revised estimate of 60 for the current year and an actual payment of 23 lakhs in 1927-28.

This is a large increase, but is it enough? I have no doubt Honourable Members will ask me: "What is our full liability? Are we meeting it? If not, why not?"

I think I can explain the realities of the position most clearly in the following way. Government, by issuing cash certificates, obtain the use of large sums of money; but, inasmuch as interest is payable not year by year but in a lump sum when the certificates are discharged, Government get the use of the money in the earlier years practically free of interest. One can see how this position has worked out by following the figures in past years.

In 1926-27, the average amount of money held by Government against cash certificates was 23·82 crores. The amount of bonus paid was 16 lakhs; so that the effective rate of interest paid for the use of money was only 2/3 per cent. Similar figures for 1927-28 were:

average money held, 28·69 crores;

bonus paid, 23 lakhs, equivalent to 4/5 per cent. interest;

and for 1928-29,

money held, 31·50 crores;

bonus paid, 60 lakhs, thus giving an effective rate of interest of under 2 per cent.

Now I wish to make it quite clear that the course hitherto followed has been strictly according to the normal system of Government accounting, for, as these accounts are made up on a cash basis, it is only the actual cash receipts and disbursements which need be taken into account each year. The system cuts both ways. Thus, in the case of cash certificates which we have been considering and which are repayable with a bonus which really represents deferred interest, the earlier years benefit at the expense of the later. On the other hand, when treasury bills are issued the discount really represents prepaid interest and is all debited to the year in which the bills are issued, so that if they fall due for repayment in a later financial year it is the later year which benefits at

the expense of the earlier. If transactions are on a very large scale and not all of one kind, the net result might be expected to even itself out by the balancing of one sort of transaction against the other.

But, in our own case, it cannot be said that there is anything of sufficient importance to counterbalance the very large transactions in cash certificates. There is, moreover, a particular danger in continuing the present practice as regards this obligation, because, if certificates are renewed, the bonus payable at the end of five years is not actually disbursed but is carried forward, with the result that the real liability may be concealed for a further five years.

If we turn to consider what we ought to do in the present situation, I think we may say that there is a two-fold obligation. First, we ought to provide from revenue each year a sum equivalent to a fair rate of interest on the money of which we have the use. That is our normal recurrent obligation, the meeting of which will prevent the further accumulation of arrears. Secondly, we have now weighing upon us a further obligation, that of providing for the accrued liability which is made up of the amount by which the sums paid in the past by way of bonus have fallen short of the interest which was really accruing during that period.

Let us see what this means as applied to the forthcoming year. I calculate that, if all the outstanding certificates are held till maturity, the interest accruing for 1929-30 on the money actually in our hands would amount to about 1,50 lakhs. Against this, we estimate that the bonus which we shall actually have to pay out in that year will be 1,10 lakhs, or 40 lakhs less. Therefore, in order to meet the double obligation to which I have referred, we ought really first to set aside this 40 lakhs from revenue and, secondly, to provide something towards wiping off the arrears of interest which have accumulated in the past. Although it has in fact proved impossible, without extra taxation, to provide in the next year's budget for more than 1,10 lakhs—and we are thus doing something short of meeting our full current liability—I think there are two mitigating factors in the situation. In the first place, on the basis of our present estimates, we shall have left over in the Revenue Reserve Fund at the end of next year a sum of 14 lakhs, and I have in mind the possibility that this sum or any other balance that may ultimately be available should be trans-

ferred to a Suspense Account against the liability on cash certificates. In addition to this, I think we are entitled to take into account that the provision for reduction or avoidance of debt includes a sum of 30 lakhs on account of Reparation payments. This is a later accretion to the original provision for reduction or avoidance of debt which was settled on its own merits without allowing for the possibility of this windfall. Taking these two factors into account, I think we may be satisfied that our accruing liability is, if Government's position is viewed as a whole, being fairly provided for; and I am left to consider the second part of the obligation: to make some provision to wipe off the accumulated arrears.

I think it is fair to say that this obligation should be considered together with the general obligation of Government to make provision for the writing off of their total debt. As Honourable Members are aware, the provisions for the existing debt redemption scheme were outlined in the Finance Department Resolution of the 9th of December, 1924, and in paragraph 33 of my predecessor's budget speech of the 28th February, 1925. This scheme is to be in force to the end of the year 1929-30, and will accordingly have to be reviewed before the estimates for the following year are framed. I have, therefore, thought it justifiable and indeed fairer to this Assembly and to the country, that any provision for amortising the accrued obligation in respect of cash certificates should be considered together with the general debt redemption scheme and not super-imposed in advance upon it. Proposals, therefore, for dealing with this provision will be worked out before the presentation of the next budget.

The group head Civil Administration shows a very large increase of 1,18 lakhs, a matter which demands a special explanation. This head includes a great number of items of a non-recurring nature, and I have already explained that it is certain of these items which can justifiably be met, for this year at least, by a draft on the Revenue Reserve Fund.

It is, I think, liable to be misleading that items of non-recurring expenditure of this kind should be shown without distinction, or at any rate without some concurrent explanation in the statement of the financial position presented to the Legislature at the time of the budget, and I propose to consider for next year whether we cannot give a clearer picture of the situation by separating out, in some way, extraordinary or non-recurrent from ordi-

nary or recurrent expenditure. It is, of course, true that expenditure of the former kind is in one sense recurrent, because there will always be a normal flow of demands for these kinds of expenditure. But it is always possible, in a case of grave financial difficulty, to call a halt to the admission of new items of this nature, in a way which is not possible with the normal recurrent cost of the existing establishment. I shall, during the forthcoming year, devote consideration to a different method for dealing with this kind of expenditure.

For the present, I will call attention to certain special items which are included:

First, we have to find as much as 29 lakhs for India House in London, which is expected to be completed next year, so that it will not appear again.

Again, we are providing 16·4 lakhs for agricultural research, of which only 1·4 lakhs represent normal recurrent expenditure and 15 lakhs represent the initial grant towards a total Endowment Fund of 25 lakhs. I hope to be able to provide the remaining 10 lakhs in 1930-31. But in the event of financial stringency, it may be possible to postpone this, and in any case these payments represent initial payments which will not recur. As Honourable Members are aware, the Agricultural Commission recommended an initial Endowment Fund of 50 lakhs, but, in substitution for this, the Government of India propose to create an Endowment Fund of 25 lakhs and to supplement this with an additional voted endowment of 5 lakhs each year. Normal recurrent charges on account of staff are estimated to amount to 2·25 lakhs, so that when the full scheme is going, the normal recurring charge will be 7·25 lakhs as against the provision of 16·4 lakhs made in 1929-30.

The next item for special consideration is 20 lakhs for additional expenditure on civil aviation. This again represents very largely initial expenditure of a non-recurring nature on the preparation of ground organisation, though I feel bound to point out that if an active policy of Government encouragement to the development of civil aviation is to be carried out, there will be recurring charges under this heading. The exact amount of these recurring charges cannot be estimated until the amount of subsidy that has to be paid to the parties undertaking the service is known. The point, however, which I wish to make at present, is that, so far as concerns the present programme, it includes nothing except the estimated sub-

sidy for six months for an overland service from Karachi to Delhi, and Government retain complete liberty of decision as regards further extensions. Our financial commitments, therefore, at the moment are still under control, and a substantial part of the item of 20 lakhs, now provided for, need not necessarily be recurring.

Apart from the above items the head with which I am now dealing includes votes for general beneficial expenditure, such as 5 lakhs for the additional grant to the Benares Hindu University; 2 lakhs for the Bose Research Institute; 4 lakhs for reclamation operations in the Andaman Islands; and $1\frac{3}{4}$ lakhs for special grants to the Pasteur Institute of India.

All these items to which I have referred are special items, and they account for no less than 78 lakhs. It is relevant to mention that there are other items of non-recurring expenditure of a beneficial character elsewhere in the estimates, *e.g.*, 6 lakhs for general measures for the improvement of the conditions of the poorer population of Old Delhi, and $8\frac{1}{2}$ lakhs for irrigation and other development projects in the North-West Frontier Province, Baluchistan and other minor administrations.

The future efforts of Government to provide money for beneficial and constructive purposes, such as I have specially mentioned, must, of course, depend on the financial position, but I should like to take this opportunity to emphasise my own view that it would be unworthy of this country if Government did not take steps to provide themselves with revenue for meeting obligations of this nature.

The contribution payable by the Railways to General Revenues will be 6·25 crores, inclusive of 13 lakhs on account of the one-third share of the excess over 3 crores of the amount available for transfer to the Railway Reserve Fund. The total contribution is 79 lakhs more than the revised estimate for the current year.

The prospects of the Indian Posts and Telegraphs Department for next year are more hopeful than is indicated by the revised estimates for 1928-29. Now that the outstanding grievances of the staff in the matter of pay and other conditions of service have been redressed, it is no longer necessary to make heavy provisions for new measures of this kind. With a moderate improvement in the revenues of the Department it is expected to work at a loss of not more than 8 lakhs. The position is thus more satisfactory, but I regret that it still falls far short of anything which would make a reduction in postal or telegraphs rates justifiable.

The Indo-European Telegraph Department is expected to show a loss of $5\frac{3}{4}$ lakhs against a loss of about $7\frac{1}{2}$ lakhs in the current year. The loss in working the two Departments together will thus be about 22 lakhs less than in 1928-29.

Lastly, I have to inform this House of the position as regards military expenditure. Apart from the grant of 10 lakhs to cover the Shea Committee measures in connection with the Territorial Force, to which I shall not refer again, the net demand is 55 crores. Honourable Members will not be surprised to see this figure, as it was indicated by Sir Basil Blackett, in introducing the budget last year, that there was no prospect of reduction for some time to come. The general situation which Government had to face in connection with the Army was also explained to this House at length in a statement and in a memorandum laid on the table by my Honourable friend the Army Secretary on the 5th of September last. I need not therefore enter into an exhaustive examination of the details of this question; but I wish to give this House a short explanation of the present position in my own words.

It will be remembered that in the year 1922-23, when Lord Inchcape's Committee conducted their enquiry, the actual net expenditure on Defence amounted to $65\frac{1}{4}$ crores. As a result of that enquiry, the Committee recommended that, in the following year, the scale of military expenditure should not exceed $57\frac{3}{4}$ crores and that, in subsequent years, the estimates should be reduced to about 57 crores. They urged that a close watch should be kept on the details of military expenditure with the object of bringing about a progressive reduction in future, and indicated that, provided a further fall in prices took place, it might be possible to reach the figure of 50 crores.

The Committee's recommendations were accepted, subject to certain well-known reservations by Lord Rawlinson, and resulted in a reduction from an actual expenditure of $65\frac{1}{4}$ crores in 1922-23 to $56\frac{1}{4}$ crores in the following year. Slight further reductions have since been affected, and during 1927-28 and 1928-29 the expenditure has been about 55 crores. The substantial fall in prices which the Committee envisaged when they contemplated the possible reduction to 50 crores after some years has not yet been realised, while Army expenditure to-day includes considerable additional charges due to causes which the Retrenchment Committee could not foresee—principally the necessity of improving the pay

of the officers of the Army and granting passage concessions on the scale of civil officers of Government in accordance with the recommendations of the Lee Commission. Further, the Army now pays customs duty on imported stores, and also pays the cost of all stationery and various other services rendered by other Departments of Government. These additional charges amount to approximately one crore of rupees, and were referred to by His Excellency the Commander-in-Chief in his speech in this House last March.

By 1926 it became evident that stringent curtailment in expenditure had produced deficiencies in certain essential equipment, and also that the Army in India was failing to keep pace with modern developments adopted by the British and other armies. For this reason, my predecessor, in introducing the budget for 1927-28, warned the House that only the strictest economy and vigilance would prevent a rise in the military budget. The House will also recollect the situation as regards the efficiency of the Army, as explained to the Public Accounts Committee in 1927. Again, in introducing last year's budget, Sir Basil Blackett reiterated his warning of the previous year.

The programme for the modernisation of Army equipment which was ultimately worked out was explained in the statement made by the Army Secretary to this House on the 5th September, to which I have already referred. This programme included the expansion of the Air Force by two squadrons and a provision for the modernisation of the equipment of that Force in India; also a provision for measures in connection with anti-aircraft and anti-gas regulations, and for the mechanisation of the transport and of fighting units, together with the repletion of the Reserves. The total cost of the full programme was estimated at 10 crores, made up of 8 crores for the specific measures defined above and 2 crores to cover subsidiary requirements not yet exactly defined.

The revelation of these needs created a difficult financial problem. Government decided that the military budget could not, in any case, be allowed to exceed the figure of 55 crores, and that the special expenditure required must be found within the limits of that sum. Certain automatic savings were in sight, principally those due to the reduction in the pay of British troops, amounting altogether to a saving of more than one crore; and over and above these savings the Army authorities undertook to carry out a special economy campaign in order to provide the additional money that was required.

Accordingly, it was possible to devise a plan which provides that if the Army budget is maintained at a figure of 55 crores for four years—starting with the year 1928-29—then, apart from any abnormal or unforeseen circumstances, the necessary special expenditure will be found within the limits of this sum. As it is impossible to forecast exactly the rate at which the new equipment will be provided and as it is important to avoid fluctuations in the military budget from year to year, it is proposed to adopt the procedure of transferring to a Suspense Account any sum within the limit of 55 crores not spent in any particular year, on the understanding that this Suspense Account can be drawn upon in subsequent years. This is really a logical corollary to the system of net grants with liberty to re-appropriate savings to meet expenditure on essential new services—a system the advantage of which, as a temporary arrangement at any rate, was recognised by the Public Accounts Committee in 1927.

Provided that a close check is kept throughout by the Finance Department on all expenditure, it may be claimed that there are considerable advantages in an arrangement on these lines, for it has the effect of removing all inducement to the Army authorities to rush through expenditure before the end of a financial year in order to avoid the lapsing of a particular grant. I think, indeed, that in the carrying out of such a programme of re-equipment as I have explained above, it is essential to have some provision of this nature for equalising the actual appropriations over a period of years. A further advantageous result which, according to my information, the experience of the working of the arrangement since last summer has demonstrated, is that it results in the whole-hearted co-operation between the Army authorities and the Finance Department in the search for all possible economies, for the Army authorities know that the completion of the programme of re-equipment is dependent on the discovery of such economies. I am glad to be able to take this opportunity of testifying to the helpful attitude adopted by the Army authorities in this matter.

In order to show how the arrangement is actually working out, I may state that for the current year, 1928-29, the expenditure on normal standing charges of the Army will be 53½ crores, leaving approximately 1½ crores which will have been devoted to the special programme. It is further estimated for 1929-30 that the ordinary maintenance charges in the Army will amount to 52·94 crores,

leaving a margin of 2·06 crores for expenditure on the special programme.

The normal cost of the standing military charges is thus being steadily cut down, and it is, therefore, possible to hold out a very definite hope that when the four years' programme of re-equipment is completed, that is to say, after the year 1931-32, the total military budget will, apart from any circumstances which cannot at present be foreseen, be substantially reduced. It would be unwise for me at present to commit Government to promising a definite figure, but I can assure the House that the Finance Department will exercise the closest scrutiny of the execution of the programme.

Although these ultimate savings are in sight, I am fully conscious that the House must share with me, as a Finance Member on the threshold of his term of office, a feeling of disappointment that no immediate relief for the budget can be obtained from the economies which are really being effected in the standing military charges of the Army. It will, however, at least be something of an achievement if an important programme for modernising the equipment of the Army, costing about 10 crores, can be carried through in 4 years without an increase in the budgetary provision. Moreover, it can be definitely stated that when the programme is completed, the country will be provided with a more efficient force at a smaller cost. To give the country better value for its money must indeed be the key-note of our policy. To this extent at least, I hope that all can agree that the programme which I have outlined is a move in the right direction—a direction in which future progress must constantly and energetically be sought.

I wish to make it clear that, in giving the explanation which I have just completed, my object has been to lay the facts as fully as possible before this House and to indicate to them the programme which Government have in mind. At the same time, there will be no change in the existing system of financial control, while Government are under no binding obligation in the matter. Unforeseen circumstances, such as an acute financial crisis, or constitutional changes occurring before the programme is completed, might modify its execution. If, however, circumstances remain normal, it is the settled intention of Government to work upon the lines which I have explained.

The more important variations from the revised estimate may now be summarised as follows:—

	(In lakhs of rupees.) Better.	Worse.
Revenue from Customs . . .	40	...
Revenue from Salt	...	1,30
Revenue from Opium . . .	...	42
Revenue from Currency . . .	36	...
Expenditure on account of Civil Administration	...	1,18
Net contributions from Railways .	79	...
Loss on the working of the Posts and Telegraphs Department . .	22	...
Other heads	...	7
TOTAL .	1,77	2,97
Net .		1,20

The net result for 1929-30 is therefore 1,20 lakhs worse than for 1928-29, or in other words, instead of the surplus of 30 lakhs, which the revised estimates show for the current year, we shall have to make up a balance of 90 lakhs in 1929-30 from other sources.

If it had not been for the fact that 1928-29 has gained 65 lakhs from salt revenue at the expense of 1929-30, the latter would actually have shown, on balance, an improvement of 10 lakhs over 1928-29, and the amount required to balance next year's budget would have been no more than 25 lakhs. Taking this into consideration, and in view also of the fact that the Civil Administration estimates this year contain a number of special items, to which I have already referred and some of which need not necessarily be repeated, I have, as already explained, thought it justifiable to provide the necessary balance from the Revenue Reserve Fund and to defer any question of imposing new taxation. The Revenue Reserve Fund, as already explained, is expected to stand at 1,04 lakhs on the 31st March, 1929, so that, by providing from this source the sum of 90 lakhs which is required to balance the budget for 1929-30, there will still remain a balance of 14 lakhs left in the Fund at the close of that year.

I have dealt so far with the normal budgetary situation and have left one particular proposal till the end. The Finance Bill, which I shall very shortly beg leave to introduce, contains a provision, necessitated by the recommendations of the Indian Road Development Committee, for the increase, from 4 to 6 annas per gallon, of the import and excise duties on motor spirit. The addi-

tional revenue expected to be realised on this account is 6 lakhs in the current year and 83 lakhs in the next. These amounts have, accordingly, to be added to the estimates of customs revenue which I have already mentioned to the House. But there will also be a corresponding addition to the charges under the Civil Works head, representing block grants of the same amounts, which will be credited to a Road Development Fund from which disbursements will be made from time to time to Provincial Governments and others on the general lines recommended by the Committee. I have to make it clear that this is a measure of taxation which is not designed for the advantage of the general revenues of the Central Government but for a specific purpose which has been unanimously recommended by the Committee, and which, I have no doubt, will be welcomed by this House. The Committee, as I might remind Honourable Members, was appointed in consequence of a resolution moved in the Council of State. It consisted of 14 members of the two Chambers, including representatives of all parties and of the Government, and it was presided over by my Honourable and learned friend Mr. Jayakar, to whom I should like to take this opportunity of expressing my sincere admiration for the manner in which he accomplished his task. The subject is of great importance for the economic, social and political progress of the country generally and of the rural population in particular. It is a subject on which many divergent views are held, and it is complicated by the constitutional relations of the Central and Provincial Governments. Nevertheless, the Committee has submitted unanimous recommendations which appear to be generally acceptable, practical in their immediate application, and charged with far-reaching possibilities of future development.

The report has an added, though indeed a sad, interest in that it was signed by the late Lala Lajpat Rai, who gave much time and labour, in co-operation with representatives of all other parties and of Government, to this constructive effort for the welfare of the country.

The main figures of the budget, after allowing for the transfers to and from the Revenue Reserve Fund and for the additional taxation and its disposal just referred to, stand as follows:—

	(In crores of rupees.)	
	Revised.	Budget.
Expenditure	1,31·20	1,34·06
Revenue	1,31·20	1,34·06

I must now turn to a review of the ways and means position, and before I give any detailed account of the probable results for the current year and of my forecast of requirements for the forthcoming year, I wish to attempt some general review of the situation. It would be natural for me to do this at the commencement of my term of office. But, quite apart from this, I think the time has arrived when it is necessary to take stock of our position—to stand back and take a view of the progress over the past years and of the course upon which we are set.

The dominating feature that strikes the eye when one turns to review the course of past years is the great amount of capital development which has been achieved with a comparatively small increase in the public debt of Government.

Let me give certain figures illustrating the position. In the five years from the 1st April, 1923, to the 31st March, 1928, Government undertook capital expenditure amounting to about Rs. 1,20 crores and about £49½ millions. As against this sum, they raised, by way of loans to the public, a net amount (by which expression I mean the net proceeds of the new loans less the amount of old loans and treasury bills paid off) of about Rs. 12 crores, and about £13 millions. That is to say, during these five years, sums of no less than Rs. 1,08 crores and £36½ millions were provided from sources other than an increase in what is generally known as the public debt. Of the total amount of the capital expenditure to which I have referred, by far the greater part is accounted for by expenditure on the railways, the amount here being Rs. 69 crores and £48¾ millions. Other capital works account for Rs. 12 crores and about £¾ million; and Advances to the Provincial Loans Fund, Rs. 39 crores.

The question which Honourable Members will naturally ask is, from what sources the rest of this money has been provided and whether it is possible to rely on these sources to the same extent in the future.

To give figures which are exact in every detail would involve a very long and complicated statement. It will be sufficient for my present purpose to give approximate figures of the main headings, which I may state as follows:

	Crores.
Post Office Cash Certificates and Post Office Savings Bank deposits	37
Other Savings Bank deposits	19¼

	Crores.
Revenue surpluses (including those in Revenue Reserve Fund)	12
Provision for reduction or avoidance of debt	22½
Other appropriations from revenue	3
Reduction in opening cash balance in India	16¾
Depreciation and Reserve Funds	25½
Provident Fund balances from Railway companies	9
Gain by Exchange	7¼

These items together amount to 1,52¾ crores, and out of this sum the balance of 1,08 crores to which I have already referred, has been found, leaving a surplus of 44¾ crores. The balance of sterling capital expenditure of £36½ millions, to which I have already referred, has been found by the remittance of this surplus of 44¾ crores supplemented by a reduction of £4¼ millions in the sterling balances.

These results indicate a remarkable achievement and a very great strengthening of the intrinsic position of the country and the security which it can offer for future loans. The provision which has been made from revenue, and even the utilisation of the Railway Reserve and Depreciation Funds, to which I shall have occasion to refer again, represent a process which, to use a commercial expression, amounts to the "putting back of surplus earnings into the business" which is the process by which most sound and prosperous undertakings are built up.

At the same time, an examination of the figures which I have quoted does force one, in giving consideration to the future, to ask whether the resources which have thus been relied on in the past to supplement borrowing, will be available in the same measure in the future. It is clear that, to some extent at least, this cannot be the case. Government balances have been reduced to the lowest reasonable level; budget surpluses for the future can hardly be counted on to the same extent; the sale of cash certificates shows a progressive diminution year by year, though, as far as this is concerned, the result does not necessarily indicate that the money that was provided through this channel may not be available for investment in Government securities in some other form, now that the yield on such other securities has improved relatively to that on cash certificates. As regards the use of Railway Reserve and Depreciation Funds, and the maintenance of the accretions to the funds on the same scale, this of course raises debatable issues into which I cannot fully enter now, but which must be further dis-

cussed during the examination of the Railway Convention which is to take place this year.

For my present purpose, it is sufficient to draw, from the review which I have given, the conclusion that Government must be prepared in the future for having to raise a larger proportion of their capital expenditure in the form of public loans. There is an obvious corollary to this, *viz.*, that we must keep our capital expenditure under effective control and be watchful to limit it in accordance with the amounts which we can provide without overstraining the credit of Government in the open market.

I shall have something more to say later on the general policy affecting Government loans, but before doing this I wish to explain the ways and means position for the current year and next year. An examination of the position for these two years confirms the conclusion to which my survey up to this point has led me.

In 1928-29, it was already necessary to resort to borrowing on a larger scale, and the forecast that was presented with the budget for the year proved to have under-estimated the needs in this direction.

I have prepared a summary, in the usual form, of the ways and means position for the current year and next year:—

	(In crores of rupees.) Revised. 1928-29	Budget. 1929-30
Liabilities.		
Railway capital outlay (construction)	26·0	26·5
Purchase of Railways	4·0	7·0
Other Capital outlay	1·7	2·1
Provincial Governments' transactions	12·1	7·2
Discharge of public debt (net)	19·9	3·9
Other transactions (net)	·4	1·4
TOTAL	64·1	48·1
Resources.		
Rupee loan (net)	33·8	18·0
Sterling loan (net)	12·1	7·0
Postal Cash Certificates and Savings Bank	3·7	5·3
Other unfounded debt	4·9	4·9
Debt redemption	5·6	6·0
Depreciation and Reserve Funds	6·3	5·8
Reduction of cash balances	—2·3	1·1
TOTAL	64·1	48·1

Dealing with the current year, the following are the main items of interest. The opening balance, taking India and England together, turned out to be 4 crores less than estimated a year ago. This was because actual issues of treasury bills in March last were 1½ crores less, and railway capital expenditure was 2½ crores more, than contemplated. The position during the year has also worked out worse than was anticipated. First, railway capital expenditure again threatened substantially to exceed the original estimate, and, in spite of an application of the brake in August, is likely to amount to 26 crores instead of 24 crores as estimated; secondly, the net receipts from cash certificates have latterly shown signs of falling off as I have already explained; lastly, the weather conditions referred to at the outset of my speech have resulted in considerably larger drawings by certain Provinces. All these factors combined made it necessary to strengthen the position temporarily by the issue of sterling bills in August for £6 millions and eventually to provide for a more permanent reinforcement by the issue of a 4½ per cent. loan in January last in London for £10 millions at 91. The proceeds of this loan will be directly used to pay off the sterling bills and to meet the purchase price for the Burma Railways.

Apart from this transaction, events followed closely the course anticipated. The rupee loan issued in July was successfully launched in the form of a 4½ per cent. 1955-60 Loan and 4½ per cent. 1934 Bonds, which brought in 9·06 crores (nominal) and 25·98 crores (nominal) respectively, or a net total of 33·8 crores. It will be seen from what I have said that the current year has already provided an illustration of the need for increased borrowing, if a programme of capital expenditure on the present scale is to be continued. But there are certain special points to which attention should be called.

First, the capital expenditure included 4 crores for the purchase of the Burma Railways, which may be regarded in a sense as an artificial addition to normal needs; secondly, even for this year with its larger sterling and rupee loans, the net amount borrowed from the public in India and England together in the form of loans and treasury bills, after allowing for discharges and conversions, has only been 26 crores as against an aggregate capital outlay of just under 44 crores for Central Government's capital expenditure and drawings by Provinces. The treasury bills outstanding with the public, which according to the budget estimates of

the current year, should have stood at 9 crores, are now expected to be reduced to 6·95 crores at the close of the current year. It will be my endeavour further to reduce the outstandings of treasury bills so that these do not remain a permanent feature in the local money market conditions.

On the whole, it may, I think, fairly be claimed that Government, in spite of difficulties, find themselves at the close of the current year in a stronger position than they held at the beginning.

I can now turn to consider the prospects for 1929-30. The task with which I found myself faced was this. The Railways—our chief consumers of capital—were in the course of executing a large programme containing many projects. Their organisation for carrying out new construction had been developed to a point at which they could get on expeditiously with all the work in hand, in fact so expeditiously that for the current year and the two preceding years they had substantially overspent their allotment. On top of this, notice had been given that Government would exercise their right to purchase the Southern Punjab Railway on the 31st December, 1929, which meant finding £5¼ millions in sterling payments. Further, the Provinces were likely to require their normal ration of capital, with a prospect that this might have to be increased in order to provide for loans to cultivators in those areas where the crops had failed. The chief question which those responsible for the finances of the country had to ask themselves in these circumstances was whether it was desirable to attempt any sudden and drastic restriction in the capital programme of the Railways. A close examination of the position revealed that this would be, on almost every ground, undesirable. A programme of railway development, once it has got under way, cannot suddenly be interrupted without great waste. One commitment leads to another. New branch lines bring more traffic and this means that trunk lines have to be strengthened. Heavier trains must be drawn, which means relaying with heavier rails, rebuilding or strengthening bridges, purchasing heavier locomotives. The heavier locomotives bring the need for remodelling or rebuilding repair shops. And so it goes on. If the programme is not carried to completion, the full economic value of the work in the first stages is lost.

Apart from this, it seemed to me very undesirable that, at a time when the general state of industry and trade in the country

is at least somewhat below par, public expenditure on work which gives a great deal of local employment should be suddenly and drastically cut down.

On the other hand, I have kept constantly before me the conclusions which my earlier review of the situation has revealed, and, in framing a programme for next year, my guiding rule of policy has been this—that, while avoiding hasty action or serious dislocation of current work, we must get the course of capital expenditure well under control so that its pace can be regulated according to financial conditions, and so that, in case of difficulty, it can be slowed down without involving any damaging jar to the machine.

In the end, we have provided, as has been indicated in the figures which I have already given, for a capital expenditure of 26½ crores on the railways—a substantial sum—but the real feature in the programme is this; that the bulk of the money is to go on the execution of current work and that new commitments have been cut down to a minimum. There could thus, if necessary, be a substantial reduction in 1930-31, while measures have been adopted to ensure that the allotment for 1929-30 will not be overspent. On the other hand, work is being continued on a scale which avoids the necessity of any general dismissal of construction staff, so that, if at the beginning of 1930 prospects are not unfavourable, new projects can again expeditiously be put in hand. The working off of old commitments which is taking place this year will mean that, if anything like the same amount of capital can be provided next year, a far larger proportion will be available for taking up fresh projects for new lines.

The result of the whole programme as now settled is that, allowing for a reduction in Public Debt of just under 4 crores—in treasury bills and sterling obligations—we shall require to raise a total new loan of 18 crores. On top of this there is the £5¼ millions to be found for the purchase of the Southern Punjab Railway, and as this represents the taking over of a sterling obligation which is already in existence, I have shown in my forecast that it will be met by a sterling loan. The situation, however, as far as concerns next year, is really better than I have shown, because, according to the agreement with the Southern Punjab Railway, although the purchase price becomes due on the 31st December, 1929, the actual payment can be postponed for another four months at 3 per cent.

interest. It is therefore not at all improbable that this obligation will not affect our ways and means position until 1930-31. As regards the 18 crores to which I have referred, the question whether the whole of this sum will be found by the issue of a rupee loan in India or whether a part, large or small, will be raised in the form of a sterling loan in England is one which will be settled in the way which best suits India's interests, having regard to the conditions which are found to prevail. If there has been any apprehension lest Government's needs for borrowing next year might have a seriously disturbing effect on the market for Government securities, I think this forecast should allay it. The raising of a total sum of 18 crores, either here or in London, should, with normal conditions, offer no difficulties. These considerations bring me to the much larger question of the whole borrowing policy of Government, on which I feel it important to make some general remarks in order to clear away misunderstandings.

But before embarking on this wider issue, I will complete my account of the particular transactions for the current year and for next year.

A year ago it was estimated that we should require to remit £36 millions to London in 1928-29. Imports of sovereigns from South Africa, which were presented at our Currency offices between the 15th November, 1928, and the 15th January, 1929, amounted to about £1·8 millions, and, apart from this, imports of treasure have, on the whole, been on a somewhat larger scale than during last year. This has affected our power to remit the full amount by means of sterling purchases in the open market. The raising of a sterling loan in January, which I have already referred to, has reduced the amount which must be remitted in the current year to £29¼ millions, of which up to the 28th of February we have succeeded in remitting just under £27 millions. On the assumption that the sterling payment for the Southern Punjab Railway will be met by means of a sterling loan next year, the amount required to be remitted to London in order to enable the Secretary of State to close with a normal working balance is now estimated at £35¼ millions.

I must now revert to a general review of Government's borrowing policy. I have recently read numerous press criticisms on this matter and many exhortations from well-wishers who have offered me guidance as to my tasks and opportunities. I read all these

with interest and some with gratitude, for even those that are couched in unpleasant language are at least stimulating. But when I am told that the Government of India must abstain altogether from borrowing, I can only feel that such advice ignores realities.

In considering policy on this matter there are two main questions to answer. First, are Government to continue to encourage an active policy of economic development? Secondly, how is the necessary money to be raised?

I can hardly imagine that any one could answer the first question with unqualified negative. Capital expenditure which has been undertaken in the past five years, particularly on railway development or irrigation, has proved remunerative and greatly to the benefit of the country. Such a policy, provided the schemes are wisely chosen and well executed, must help towards the result which we all desire and on which the prosperity of India can be most firmly founded, namely, the improvement of the power of production and of the standard of life for the vast rural population of this country, which must be the basis and foundation for prosperity in the industrial centres also. Quite apart from this, as I have already said, it would be particularly unfortunate if works of this kind had to be drastically cut down during the present period of depression, of which we have heard so much in debates during this session. But, while I would press forward a wise development policy with the greatest keenness, I must also recall the words of warning which I have already used and avoid any course which might overstrain the credit of the country. The future requires the difficult combination of enterprise and caution; enthusiasm and self-control.

On the second question, as to how the necessary money should be raised, I entirely agree in principle with the policy which was advocated by my predecessor, that Government finance should be based as far as possible on attracting rupee capital in India. It is only in so far as money cannot be raised from the investing public in India that I should ever consider having recourse to sterling borrowing. I wish to leave no shadow of doubt on this matter. How far it is possible to follow out this policy depends almost entirely on the people of India. If all the money which now goes to the import of treasure was to be made available for investment in productive undertakings, India's needs for foreign capital might

well disappear. Even in the forthcoming year, with a large capital expenditure programme, we need to raise only 18 crores from the public, against which may be set the fact that the average net imports of treasure since the War, excluding the abnormally high figures for 1924-25, have been more than twice as large in value.

This is a well-worn subject and I do not wish to dwell on it further. It calls for action rather than words. I fully recognise the difficulties, and that Government cannot expect to get the small men all over India to invest their savings except as a result of a steady course of education and the provision of better facilities. This is a matter on which I hope our Banking Enquiry will throw light. In any case, it is one of our main tasks for the future. If I can do anything in this respect I shall only be following in the footsteps of my predecessor and, if I might pay him a tribute, I would say that perhaps his greatest work in a wonderful record of achievement was the stimulus which he gave to the fruitful employment of the savings of the Indian public in the development of India's resources. But however enthusiastic one may be about this idea, one must face practical realities. Conditions cannot be changed in a day, and if there are times when the whole capital required to continue a reasonable policy of development cannot be raised in India, then I can see no valid reason for refusing to have recourse to moderate loans abroad. It would, in my opinion, be a far greater evil to hold up the proper development of the country merely for the sake of avoiding all sterling borrowing, however moderate the amount. It seems to me, judging by comments which have appeared in the press and from remarks which have fallen from Honourable Members opposite in the course of debates during this session when the general condition of the country was under discussion, that there is a good deal of misapprehension on the subject. It has been implied, for example, that the policy involves India in borrowing at ruinous rates for the sole advantage of England. There could be no greater misapprehension. We can still borrow at very reasonable rates, while, so far as advantage to British interests is concerned, it must be remembered that the total amount that can be raised on the London market is strictly limited, so that, if India did not appear as a borrower, her place would easily be filled. In fact, the difficulty lies rather on the other side, namely, how to find room, in the limited number of issues that can be permitted, for all those who want to provide themselves with funds.

In all business relations it is desirable that there should be mutual advantage; but I am quite certain that in this particular relation, the balance of advantage lies on the side of India in that she has so privileged a position among the borrowers who seek funds in the London market.

A second misapprehension which also appears prevalent is that it is derogatory to the dignity of a country, or evidence of a weakness of its position, that it should have recourse to external loans. But this is an essential condition of any country in the early stages of its development, and, in this sense, India still is in the early stage of her economic development.

Even a wealthy and highly-developed country like the United States, until the Great War, got large sums of investors' money from the London Market for financing railway development projects and other enterprises of this kind. It has been estimated that in 1914 British investments in the United States, chiefly in railways, amounted to something like £760 millions. Moreover, all the great Dominions are constant borrowers in the London market. A large proportion of the railways of South America have been built with capital raised in England, while Japan, whose political and economic progress is ever held up as an example, has been a large borrower both in London and in New York, and, I might add, has her loans quoted on a 6 per cent. basis in London, and a $6\frac{1}{2}$ per cent, basis in New York, as compared with the 5 per cent. rate at which India gets her money.

Further, I think that there is a good deal of misapprehension as to the extent to which India's sterling indebtedness has had to be increased during the past years. In an earlier part of my speech, I gave some figures as to borrowings in the five years ending the 31st March, 1928. Let me carry these figures down to the end of the current year, so as to include a year of comparatively heavy borrowing. In the six years ending with the 31st March, 1929, capital expenditure abroad will have amounted to £60 millions. Against this, loans producing net amounts of £18 millions in 1923-24, of £6,862,500 at the end of 1927 and of £9,100,000 in the last loan issued in January have been raised on the London market. But on the other side, permanent sterling debt has been discharged regularly each year over this whole period in the form of railway annuities and otherwise. The final result is that, although according to the figures which I have just given a capital expenditure

of £60 millions has been undertaken, the net balance raised by the increase of sterling funded debt has only been just under £20 millions. This sum must be still further reduced when it is taken into account that the sterling expenditure includes the purchase of the Burma Railways at £3 millions. By this transaction sterling securities were cancelled so that the net amount of foreign capital on which India as a whole has to find interest in foreign currency has really only been increased to the extent of the loans necessary to raise £17 millions.

In order to complete the picture, it is necessary also to take into account any reduction which has taken place in sterling resources. Sterling treasury balances were reduced during this period by about £4¼ millions, while transfers of sterling from the Paper Currency Reserve amounted on balance, during the same period, to about £3¼ millions.

I think it is no small achievement, and demonstrates the strength of the rupee exchange position that this very large amount of capital expenditure abroad has been effected with so small an increase of external indebtedness.

I must also add a few words on one more heading in connection with this matter. Even if the amount of our borrowing had been much larger, it would not have been out of proportion to the undertaking for which the Government of India are responsible, seeing that they have to finance practically the whole railway and port system of this vast continent which contains one-fifth of the population of the world, and also to provide money for irrigation and other development projects. Government borrowing may cover many purposes, and in some cases it may be a sign of weakness. But the borrowing by the Government of India, of which I have been speaking, and which we have to contemplate for the future, indicates rather an increase in strength. For whatever is borrowed will be more than covered by sound productive investments producing a larger revenue than is required to meet the interest charges. This leads me to the consideration that it may be desirable for the future to devise some means for so presenting our demands for new money as to demonstrate more clearly to the public the purposes for which the money is to be applied and the inherent strength of the position.

While this may indicate one important line for future consideration, our main task must still be to seek for every possible means

to educate and provide opportunities for the people of this country so that they may let their savings flow into productive channels. There is room for much effort still in this direction, and even a moderate success may eliminate the need for external borrowing. But if, before this goal is reached, some such borrowing is necessary, I trust that Honourable Members will help me in this matter by taking a view of the situation uncoloured by political prejudices.

I have only a few more words to say as to the debt position. Following the practice of previous years, I quote the market prices of certain typical securities of the Government of India in India.

Market price on the 20th February.

	1923.	1924.	1925.	1926.	1927.	1928.	1929.
	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.
5 per cent Tax-free loan, 1945-55.	89 8	97 12	97 15	101 4	107 2	106 11	103 15
3½ per cent rupee loan. .	58 0	65 14	66 9	71 6	77 7	76 1	72 6

Prices, of course, are now much lower than the peak figure of 1927. But they are still substantially higher than in 1926 or the earlier years, and I think the review which I gave earlier in my speech will show that prices which ruled in 1927 and the beginning of 1928 were, in a sense, an artificial result of the abnormal abstention from borrowing which had been possible in the preceding years. The process of decline is always unpleasant, but there is at least this to be said, that the higher prices of two years ago drove some investors to seek better yields abroad, and that, taking a broad view, we may be now on a healthier level.

I must also refer to debt statistics. My predecessor used to embody in his budget speech a statement showing the debt of India outstanding at the close of a series of years. I find, from the general discussions which took place in this House last year on the budget, that a desire was expressed that the figures might be shown in a somewhat different form, and I have this year endeavoured to produce a statement of a more comprehensive nature. To the list of obligations I have added the depreciation and reserve funds and those portions of provincial balances which bear interest. To

the list of productive assets shown in previous years I have added the interest-bearing loans made to the public. At the same time, in order to give as complete a picture as possible, I have added the amounts of cash, bullion and securities held on Treasury account. Although I have tried to meet Honourable Members' wishes in this matter, I must warn them that it is extremely difficult to compile any statement which gives a complete picture of the situation. The statement which I have given makes no claim to be a complete balance-sheet. Moreover, there are many special factors which tend to confuse the picture. For example, if a loan to raise £9,100,000 is brought out on a 4½ per cent. basis at 91, the figure for our obligations in the table is shown as £10 millions. Had a loan to raise the same amount taken the form of a 5 per cent. loan brought out at par, the increase in our debt would only have appeared as £9,100,000. Further, although I have now included among Government's obligations the balances which they hold from the Railways on account of the Reserve and Depreciation Funds, these are, in reality, obligations of a different type from Government's obligations on account of loans raised from the public. Although the Railways can be regarded as something separate from Government nevertheless, in the case of the Reserve Fund, for example, this is really, in a sense, held for the benefit of Government in order to ensure the payment of the railway contribution in bad years.

I mention these facts merely to show Honourable Members that it is difficult to provide a statement which is not open to some criticism on one side or the other. I can only say that it is my desire that they should be provided with the fullest possible information; and if there is any difficulty in understanding the tables which I have given or in reconciling the particular table to which I am referring with the summaries which I have given in the earlier part of my speech, I should be willing to give further explanations. The table, as is stands, at least reveals that behind the public debt of India there is being built up an ever-increasing backing of valuable security.

Sir, my course which, I fear, has been a very long one is nearly run. I have only one more obstacle to negotiate and then I can take a straight run home. I feel that Honourable Members would think I was shirking a part of my task if I did not refer to the ratio question, for I must do those who have raised the question in recent

debates in this House at least the honour of taking them seriously. At this late hour I want to be brief and I wish also to avoid saying anything which will provoke controversial retorts. Therefore, I leave unsaid much that I could say with force and conviction and will confine myself to one simple aspect of the matter.

I am fully conscious that there are those in this Assembly who honestly and honourably advocated the view that the rupee ought to be stabilised at 1*s.* 4*d.* when the issue was still an open one, and the country in a sense had a free choice before it. I do not seek to convince any of those who took this course that they were wrong,—though this involves no admission on my part, and is, as the lawyers say, entirely " without prejudice ". I would put to them a much simpler question: Can it seriously be proposed, as a practical course, that after working on a basis of 1*s.* 6*d.* for several years—a basis actually fixed by statute since 1927—that this Government could deliberately decide to devalorise their currency by 11 per cent.? I shun all forms of over-statement, but I can hardly conceive the possibility of any more disastrous course. It would cause injustice to thousands of individuals who had entered into previous contracts, among whom perhaps the most important are the workers, manual or otherwise, whose wages and pay have been fixed on a different basis, and it would strike a blow at the credit of India in the eyes of the world from which it could hardly recover. For what guarantee would other countries have that a word once broken would not be broken again? All the arguments which are used for advocating a drop from 1*s.* 6*d.* to 1*s.* 4*d.* could be used with equal force for further inflation and further depreciation of the currency.

I have never seen any practical suggestion made as to how such a change could be brought about; but I feel sure that any man who really understands the working of these matters will realise that whether it were to be done by a stroke of the pen over-night, or allowed to take place as a result of a long period of weakness on the part of Government, the results would be equally dislocating and disastrous.

I sympathise whole-heartedly with those who, like my Honourable friend, Pandit Madan Mohan Malaviya, have expressed, in terms of great eloquence, their burning desire to improve the economic condition of the people. But I would say to him that the only way in which that can be done is by the constant and combined

effort of Government and all those who can influence public opinion, directed to the extension of education and credit facilities, to the encouragement of hard work and thrift, and to an increase in real wealth by the introduction of improved methods of cultivation and communications. Anything else is no more than a quack remedy.

I do not deny that if Government were to adopt a deliberate policy of inflation and depreciation of the currency that might act as a temporary stimulant, for it would induce a period of rising internal prices which is always encouraging to trade and it would also bring about a reduction in real wages which would benefit employers of labour making goods for export. But experience in many countries since the War is available to illustrate how dangerous is the use of such a stimulant and what disastrous reactions it may produce. For it cannot go on for ever, and it is only during the period when currency values are falling that the stimulant works. When a fixed level is reached again, prices must eventually adjust themselves and the plodding task of normal business has to be resumed once more.

Some of those who have spoken on this subject have likened the present financial conditions of India to the state of a sick man who needs some remedy. It may be said, I suppose, that upon myself as directing to some degree the finances of the country there falls the heavy responsibility of the doctor. The doctor's calling is a noble and difficult one and perhaps its duties have never been better put than in the words of the oath which Hippocrates, the Greek philosopher and scientist, who lived more than two thousand years ago, made his disciples swear. Let me repeat some of its words:—

> "I swear by all gods and goddesses that I will, according to my power and judgment, make good this oath and covenant that I sign. I will use all ways of medical treatment that shall be for the advantage of the sufferers, according to my power and judgment, and will protect them from injury and injustice. Nor will I give to any man, though I be asked to give it, any deadly drug; nor will I consent that it should be given; but purely and holily I will keep guard on my life and my art."

Sir, I would willingly accept no less binding vows, but, if I were to listen to those who advocate inflation and depreciation of the currency as a remedy for the present state of this country I should be untrue to such an oath. Then, indeed, should I be administering a deadly drug.

But let me ask: Is the country really suffering from any sudden and new disease? Are we not really in danger of exaggeration when such words are used? Judged by all ordinary standards—figures of foreign trade, railway returns, etc.,—India is more than keeping her place in comparison with other countries. Depression in trade is prevalent throughout the world, and I venture to say that there is distress in other countries to-day equal to, or greater than, that which is felt in India and attributable, like much of India's trouble, to world causes. I fully accept the statement which I have heard in this House that the standard of living among the rural population of India is miserably low, and I yield to no Member on the other side in my keenness to take a hand in a joint effort to remedy it. But this is no sudden and new phenomenon. No one can point to the particular date when the rupee was stabilised at 1*s.* 6*d.* and say truthfully: "This is the date when it began; before this we all lived in a golden age."

Sir, there is one condition above all others which is requisite for commercial prosperity, and that is a condition of security. If this talk about reducing the ratio is taken seriously it can only produce a feeling of uncertainty and insecurity and, amongst other unfortunate results, it must tend to induce those who can do so, to invest their money abroad.

I cannot believe that it really is taken seriously by the bulk of the business world, but still, talk by responsible Members of this House cannot be without some effect. Therefore, I would appeal to those who have urged a contrary course and say to them: "You have done your best for what you thought right. Whether the course actually taken was right or wrong, it would be a far greater evil now to alter it and Government are bound to use all the resources at their command to prevent its alteration. The time has come therefore to look to the future in which the interests of the country demand, above everything, that we should pull together to work out our salvation on the present level." Response to such an appeal would bring honour to all who accorded it.

There is another ground on which I would urge on all those that have the public interest at heart to make an end of this talk which ascribes every evil to the 1*s.* 6*d.* rupee and holds out a 1*s.* 4*d.* rupee as the magic remedy which would bring prosperity to all. Such talk is harmful because it diverts men's minds from efforts to pursue the hard path to any real improvement. Let us rather unite to forge our way along this path, and, for my part, I promise to spare no effort and to reject no sound suggestions which can help to clear it.

Sir, I have tried to present to-day a plain and unvarnished statement of facts—disguising none of the difficulties and exaggerating none of the favourable features. The note which I have wished to strike in my speech and to embody in my budget proposals is that we must look at the state of the country with a broad vision and not rush into sudden measures on the influence of what may be only a temporary condition.

If one looks back over the past six years, one cannot fail to be struck by the great inherent strength exhibited in the position. On the side of capital expenditure I have quoted figures to show how enormously the productive assets of the country have been increased in proportion to the loan liabilities incurred. A broad view of the revenue position is also encouraging. When one considers all the revenue which has been sacrificed by the Central Government in the past six years in order to give greater latitude to the Provinces or to provide some economic advantage to the country—nearly 10 crores of provincial contributions given up, and in taxation $1\frac{3}{4}$ crores on cotton excise, 85 lakhs on machinery, $1\frac{1}{2}$ crores on opium, to mention only the most important cases—and when one then realises how the other sources of revenue have moved towards filling the gap, I think one is justified in feeling confidence as to the future. It might perhaps be said that the rate of capital expenditure has recently shown tendencies to acquire too great an acceleration or rather, to put the matter in another way, Government have not increased their fixed capital (that is to say, money at their disposal from long-term loans) quite sufficiently in proportion to the expansion of the business. Possibly also, sacrifices of revenue have been based on expectations which, for the moment, may prove too optimistic. With these possibilities in mind, I would say that we are passing through a period which needs a steady hand on expenditure and the careful conservation of our credit and that, com-

bined with this, there is also needed some broadening of the basis on which the capital, which is required for the development of this vast continent, is to be provided. These objects will be my chief concern, and I shall pursue them with all the more confidence and enthusiasm because of my firm conviction that the financial position of this country is fundamentally sound and that there can be no country in the world which has better security to offer for its loans.

Sir, I have only one more word to say. I have expressed in my last sentences the confidence which I feel in the economic foundations of this country. But there is one thing on which those foundations must rest, and that is political stability. I have deliberately refrained from disturbing my account of the economic position up to this point by any extraneous considerations, nor do I wish to appear as preaching to this Assembly on a subject which might be held to be outside my sphere. But I have set myself the task of describing the situation exactly as I see it, and this task I must complete. India till now has had one priceless possession in her credit with the outside world. I believe, for such reasons as I have tried to make clear to-day, that the economic advancement of the country depends on the maintenance and use of this credit both within and without. Fears of political disturbance cannot but shake it, and to do this is to endanger the structure on which the material welfare of the millions of this country depends. I pray that this vital consideration may not be forgotten. Having said this, let me close, as I began, on a personal note. Though it is my fate to deal with finance and the production of wealth, I do not, any more than many Honourable Members opposite, place materialistic objects above all other ends in this world. Nevertheless, an adequate measure of material well-being is a necessary condition of happiness in any state. I trust that even those whose thoughts are mainly concentrated on political objectives which may range them at times against the Government of which I am a Member will not forget this fact, and will find in the economic sphere some common ground on which we can co-operate for the material advancement of the Indian people. Is it too much to hope that such co-operation may have its reactions also in wider spheres? The money with which I have to deal suffers from the material limitation that what is spent is gone, but goodwill is inexhaustible and the more that is expended, the greater will be the supply."

Sir George Schuster's budget proposals met, on the whole, with a very favourable reception. Considerable delay, however, occurred in the passing of the Finance Bill, but this was due rather to the selection of the Finance Bill as a medium for the employment of obstructionist tactics than to any serious opposition to the financial proposals themselves. In the course of the discussion of the Bill an amendment was carried reducing the salt duty from Re. 1-4 to Re. 1 per maund. The duty was, however, eventually restored to the former figure by the Legislative Assembly itself, on a recommendation made under section 67B of the Government of India Act by His Excellency the Governor-General. Owing to the delay which had taken place in the Legislative Assembly, it was necessary for the Finance Bill to be introduced and passed in the Council of State in a single day, the Council of State agreeing, in the first instance, to this unusual procedure being followed.

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The only financial events of special importance relating to 1928-29 other than those mentioned in the Budget speech were the inauguration of the Currency Note Press of India and the setting on foot of a very comprehensive enquiry into banking conditions in India. The inauguration of the Currency Note Press took place on the 14th April, 1928, at Nasik, the inauguration ceremony being performed by Sir Bhupendranath Mitra, who then held the portfolio of Finance. Prior to 1869, currency notes were not in use in India, and till 1862 India's postage stamps were printed by the Survey of India from plates made at the Calcutta Mint. In 1861 the Bank of England printed the first currency notes for India, and they were issued for the first time in March, 1862. In the same year Messrs. Thomas de la Rue and Company first printed postage stamps for India, and they continued to hold the contract for this work until 1924. The decision that India should print her own currency notes resulted from an investigation into the cost of printing them in England, which was undertaken in 1914. The war arrested progress in the matter, and it was not until 1922 that it was revived. Further investigations were then made, and the Government of India decided to establish their own Stamp Press and also to set up a Currency Note Press, the latter to be brought into use when the Bank of England's contract for the supply of currency notes terminated in 1929. The Stamp Press was completed in 1926, and shortly afterwards the Bank of England said that an earlier termination of their contract than the due date, 1929, would

be convenient to them. Accordingly, the scheme to establish a Currency Note Press in India was put in hand in August, 1926. Nasik Road, between Poona and Bombay, was selected as the site of the Press because of the suitability of its climate, which is not subject to sudden or large changes of humidity and temperature. The Press is equipped with machinery of the most up-to-date kind, and the success of the scheme, which seems already assured, is largely due to the enterprise, energy and ability of Sir George Willis, now Master, Security Printing in India, and formerly Senior Mint Master in India, who has been associated with the scheme from its inception, has supervised the construction of the buildings and the installation of the machinery, and is now in charge of the current operations of the Press, both in regard to the manufacture of stamps and the manufacture of currency notes.

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Proposals for an enquiry into banking conditions in India had been under consideration since 1925, but the Government of India had first held that it would be preferable to postpone an enquiry of the kind until the Royal Agricultural Commission had reported. They also hoped to gain important experience of banking conditions in India if the Reserve Bank were established as recommended by the Hilton-Young Commission. With the publication of the report of the Agricultural Commission and the failure of the Reserve Bank Bill the question was revived, and the Government of India came to the conclusion that such an enquiry would be valuable, among other things, in instructing public opinion in India as to the main requirements of the country and possibly providing a new line of approach for the revival of the Reserve Bank scheme on safe and sound lines. Accordingly a Central Committee and a number of Provincial Committees to deal with the special requirements of the different provinces have been set up. Although it strictly falls within the scope of the next year's Report, it is convenient to add that it is expected that the Provincial Committees will be able to submit their reports by the end of March, 1930, and that the Central Committee will submit its final report to the Government of India by April, 1931. The Government of India propose to appoint, later on, a small Committee of Experts selected from England and other countries with well developed systems of rural credit and industrial banking who will hold a joint discussion with the Central Committee and assist the latter in making its final recommendations to the Government of India.

CHAPTER VIII.

External Relations, Military, Aerial and Naval Affairs.

For years after the establishment of British Rule, India remained an essentially isolated, self-centred political and cultural system. With the affairs of the outside world, and even with those of the rest of the British Empire, she had no concern, and it was not until after the assumption of the Government of India by the Crown in 1858 that her educational system and the growth of a habit of over-seas travel by her people gradually broke down some of the barriers to mental and spiritual intercourse with the western world. Of the forces which have shaped the events of Indian history and determined the conditions of Indian life during the past half century, the two most vital have been, first the process of mechanical invention, which by making travel and communications between the West and the East speedy and certain, has brought India within the orbit of western ideas, and second, India's reaction to this process with many results political, cultural, racial and economic, to trace which will be the task of some historian of the future. And of this process no part is more important than the steady growth of India's interest in affairs, particularly political affairs, outside her own borders. In a sense she has been concerned with the external affairs of the United Kingdom and the British Empire ever since her government passed into British hands, but this concern was only remote and accidental. Until recently the people of India could not feel that they had any living interest in such matters since they had no voice in them and were not even in direct contact with them. Since the war, however, her improved international status, her growing economic stake in the world, and her representation in the Imperial Conferences have provided her with both the incentive and the need for taking a close interest in world politics and affairs. Further, her international status is different now from what it was in 1914, for she attained original membership of the League of Nations as one of the signatories of the Treaty of Versailles. In these negotiations His Majesty King George V was represented for India by the late Right Honourable Edwin Samuel Montague, M.P., His Secretary of State for India, and Major-General His Highness Maharaja Sir Ganga Singh Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., K.C.B., A.D.C., Maharaja of

Bikanir. India thus obtained separate representation and became an original member of the League of Nations as a result of her services during the war. Again, the presence of large numbers of her nationals in various parts of the British Empire has forced her to take an interest in the domestic politics of the Dominions and Crown Colonies, and in Imperial politics in general, especially when these are concerned with the Near East and Asia. Thus, as one of the members of the British Commonwealth, and now as a member of the League of Nations, India has found her interest insensibly widened and attracted outwards until very few parts of the world are left in which she has no interests of any kind.

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To-day India has her own external interests which are peculiar to herself and which fall broadly into two classes sharply distinguished from each other. There are first her relations with her immediate neighbours on her landward side, and secondly her guardianship of the interests of her people overseas, most of whom are living in some part or other of the British Empire. The problems raised by this second class, as already indicated, are ultimately problems of Imperial politics, whilst the former resolve themselves primarily into problems of defence. This latter dictum does not mean, of course, that India constantly apprehends danger from all her neighbours across her land frontiers. Such a notion is far from the truth as the following brief description will show.

The land frontiers of India are about 6,000 miles in length. The boundary of Indian Baluchistan marches with Persia on the West and with Afghanistan on the North, the three countries meeting at the famous mountain of the Black King (Koh-i-Malik-Siah) the most westerly point of India. From this lonely peak starts the Durand line, which, leaving Baluchistan at the Gumal river, runs some hundreds of miles north by east demarcating the boundary between Afghanistan and India, and for a considerable distance bordering the well-known belt of Pathan tribal territory which since 1894 has been formally included in India. Tibet borders about 1,500 miles of India's frontier, and beyond Burma, our frontier divides us for about a thousand miles from Chinese territory. South of the Chinese frontier, Burma touches part of French Indo-China for a hundred miles and then marches for 600 miles with Siam.

Any study, however brief, of North-West Frontier history and policy will show the North-West Frontier problem becoming more

and more complex and difficult as communications improve and weapons of precision are perfected. It is usual to regard the North-Western Frontier problem as being concerned only with the relations between the Government of India and the war-like tribes who inhabit the stretch of difficult mountain country between the administrative border and the Durand Line, but, in truth, these are nothing more than one factor in a problem of far wider scope. Leaving aside the domestic question of the most desirable form of Government for the North-West Frontier Province, a question about which there has been some controversy since the inauguration of the reformed constitution in the other provinces of India and which, as we have already seen, is now a factor of much importance in the Hindu-Muhammadan problem, there is also the international aspect of the problem and the vital military problem with which the other aspects of the frontier policy are intimately bound up.

From the dawn of history the North-West Frontier has been the gateway into India through which have poured Persians, Greeks, Scythians, and Muhammadans. Before the keys of the gate passed into British hands with the conquest of the Punjab in 1849, the threat of an invasion by Napoleon Bonaparte and the ambitious schemes of the Emperor Paul of Russia had caused the British to look anxiously to the North-West and begin their North-West Frontier policy untimely with embassies to Persia and Afghanistan. Malcolm and Elphinstone were the forerunners of a long line of distinguished "politicals" who for the past three or four generations have been both the instruments and the makers of British policy on the North-West Frontier. The maintenance of a sound policy on the North-West Frontier in India must always hold a foremost place among the pre-occupations of any Indian Government.

The day-to-day frontier problem is provided by the relations between the Government of India and the tribes who live between the administrative border and the Durand Line, and is a problem partly diplomatic, or, as it is called in India, "political", and partly military. The political officers guide the tribes as far as they can along the path of peace and friendliness with India, whilst the various armed civil forces on the frontier, supported when necessary by the troops, stand by to repel raids or more serious aggressive actions by the tribesmen. The military history of the frontier has been adequately written more than once, but its "political" history still remains unchronicled as a whole. A

WANA—JANDOLA SECTION—NEAR SHAHUR TANGI.

ruthlessly compressed summary of this history is given below, but first it will be as well to describe briefly the physical features of the North-West Frontier.

The North-West Frontier, as the term is commonly understood, means the whole tract of country which runs from the Hindu Kush in the north down to the Arabian Sea, including the North-West Frontier Province and Baluchistan. This territory lies mainly to the West of the Indus. The Hazara District, it is true, lies east of the river, but geographically and ethnically it belongs partly to Kashmere and partly to the Punjab, and the tribes on its border, who are mostly somewhat backward off-shoots of the great Yusafzai tribe, do not present such a formidable problem as do the warlike and well-armed people on the borders of the four trans-Indus Districts. In this large area we distinguish the five settled districts of the frontier province and the so-called trans-border, that is, the stretch of mountain country between the administrative border and the Durand Line, whose inhabitants provide what we have called the day-to-day problems of the frontier. Stretching all along the administrative border and thrusting forward into the hills here and there, as in the Malakand, and in the Khyber, Kurram, Tochi, and Razmak valleys, and along the Zhob Road which runs through the Sherani country, south of Waziristan, are military cantonments, or posts held by regulars, militia, Frontier Constabulary, or Khassadars, whilst at the north and south respectively of the long line stand the two great bastions—Peshawar and Quetta.

The trans-border tribes are linked to each other from North to South, and military operations against any one of them are apt to produce sympathetic effects among the others. These tribes are among the hardest fighters in the whole world, and only picked and highly trained troops can compete with them on any thing like equal terms in their own hills. They are believed to number nearly three millions, of whom at least half are males, and of the latter close on three quarters of a million are regarded as adults and fighting men. Their armament has vastly increased within the last few years, and as long ago as 1920 there were believed to be not less than 140,000 modern rifles in tribal territory. The Mahsuds alone can arm effectively about 12,000 men, out of a total of 16,000, whilst the Wazirs can similarly arm 10,000 out of a total of 23,000 fighting men. The difficulty of the military problem presented by the frontier tribes can thus be appreciated.

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It is possible to distinguish two different parts of the trans-border which presents two somewhat dissimilar sets of conditions. One part is the territory which stretches from north of the Kabul River to Waziristan, whilst the second is Waziristan itself. The relations between the Indian Government and the tribes inhabiting the first of the above divisions have in recent years been satisfactory on the whole. North of the Kabul River are great chiefs like the Mehtar of Chitral, the Nawab of Dir, and the Wali of Swat. These may fight among themselves, but they all desire friendly relations with India. Trade between this section of the trans-border and India is active, and the Swat River canal finds employment for many hardy spirits who might otherwise make a living by committing crime inside British India. South of the lands of these great chiefs are the Mohmands, Afridis, and Orakzais, all of whom have far too many connections with India to fight except on any but the most serious grounds. Waziristan, however, until very recently presented a very different face. Its people are fanatical and intractable to a degree, and had until a few years ago come less under British influence than any other of the great trans-border tribes. The Indian Government have conducted seventeen active operations against them since 1852, and four since 1911, the latest of which provided the most desperate and costly fighting in all the history of the North-West Frontier. Also, as one goes from north to south of Tribal Territory, one finds that the constitution of tribal society grows steadily more and more undisciplined as one approaches Waziristan, where, until the last few years, a state of chaotic license prevailed in which every man was a law to himself and a well-aimed bullet was more effective than any consideration of right and justice.

From the Sikhs, the British inherited only a haphazard, unscientific, and ill-defined frontier line. They took over no policy or system of understandings or agreements, and for a whole generation the Indian Government limited its frontier policy to abstention from interference in the troubled affairs across the administrative border, tempered by fleeting punitive expeditions against individual tribes when necessary. But the advance of Russia in Central Asia and the ambiguous behaviour during the seventies of last century of an Amir of Afghanistan emphasised once again the importance of the latter country to Indian frontier policy, whilst the long and mostly scholastic dispute between the supporters of the rival "forward" and "close border" policies had at any rate made

clear the importance of the trans-border tribes in the event of India's having to conduct military operations west of the administrative border. These things, fortified by Major Sandeman's striking success in conciliating the hitherto hostile Baluch tribes to the south, a success which had already become evident by the end of the seventies, brought about a change in the Government of India's views on frontier policy. They began to realise that they ought at any rate to know something of what was happening in the frontier hills and that they ought if possible to try to keep friendly relations with the tribes. The establishment of the Khyber Agency at the end of the seventies was the first step in a new policy which has arrived, *viâ* Lord Curzon's memorable Frontier settlement, at the policy which is now being followed in Waziristan, that is, in the most intractable and difficult part of the Frontier. This policy is a development of Lord Curzon's policy, which, in its turn was an adaptation of Sandeman's methods in Baluchistan to the different conditions of the North-West Frontier. The essence of Sandeman's system was friendship with and support of the tribal chiefs so long as they behaved well, and the provision of employment for the tribesmen in levies, police, and other forms of service. Sandeman, in fact, gave both the Baluch chief and his followers material incentives to good behaviour, and a stake in peace and order. A part of Baluchistan was taken under direct British control, and British influence was established throughout the rest of the country. Lord Curzon's settlement has been well described as a mixture of the Sandeman and " close border " systems. The tribesmen were paid to protect their own country and the Indian border, and regular troops were withdrawn from advanced positions and replaced by tribal militias. But there was no occupation of tribal country and no attempt at any administration, however loose, up to the Durand Line except in the Wana, Tochi, and Kurram Valleys, where an informal administration on lines suitable to tribal conditions met with much success. Thus the North-West Frontier was not " Sandemanised " by Lord Curzon. Until the outbreak of the Great War, this policy served its purpose admirably, but during the great unrest from 1914 onwards, the Curzon system, like so many other older and more majestic institutions, broke under the mighty pressure. All through the War it was a question, at any rate on the Waziristan side, of holding on grimly and waiting for better days. The third Afghan War in 1919 sent along the whole frontier a new wave of unrest which broke in Waziristan in the

bitterest and most determined fighting which the Government of India have ever had to undertake on the North-West Frontier. When peace was restored once more it was realised that the time had come to try to settle the "political" part of the Frontier problem once and for all, and that the attempt should begin in the old frontier storm-centre Waziristan.

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The new policy is essentially positive and constructive in character. It is a forward policy in the very best meaning of the word, for it is not a policy of military conquest, but of civilisation. Its central features are the opening of Waziristan to civilising influence and giving to the tribes a stake in the administration of law and order. Since 1920, fine high roads have been driven through the hills of Waziristan linking the trans-border posts with military posts in the rear, and tribal levies, or Khassadars, finding their own rifles and ammunition, have been enrolled to police the country. Thus the spirit of self-government among the tribes of Waziristan and their sense of responsibility will be kept alive, whilst British influence and economic forces will work steadily to destroy the causes which for centuries have kept these virile people as murderers and robbers. We shall see shortly what measure of success has already attended this policy, but first we may glance quickly at the existing system of border defence in order to complete this part of our survey of frontier policy.

The Civil Defence forces of the North-West Frontier Province fall into two main categories—those which are established on the settled side of the border and those which are definitely a trans-frontier corps. Of the former, there are first the village pursuit parties, or *Chighas*, who are obliged both by law and by custom to turn out for defence or pursuit whenever a raid occurs. Government provides each village in the raiding area with a certain number of rifles for the use of the *Chighas*, but these are otherwise entirely unorganised and are not in the service of the Crown. To co-operate with these *Chighas* when more prolonged operations are necessary, selected members of the village communities were organised into levies, drawn from the same sources as the *Chighas*, but pledged to full or part time service, and receiving arms, ammunitions, and pay from the Indian Government, either directly or through the local Khans who often act as both officers and organisers of the corps.

The District Police, of course, exist on the border just as in every other part of British India, but the unsettled conditions there render it necessary for them to be better armed than other civil police forces; otherwise their work differs little from that of the District Police in other provinces. But the back-bone of the defence organisation on the administered side of the border is the Frontier Constabulary. This force stands between the Police and the regular military forces, and its main function is the prevention of raids and the capture of raiders and outlaws. It patrols the border and ensures the safety of roads and communications generally. The British officers are members of the Imperial Indian Police seconded from their own service. Its posts are mainly on the edge of administered territory, but many of its operations take place across the border.

The Trans-Frontier Civil Corps are three—the Kurram Militia, the Tochi Scouts and the South Waziristan Scouts. The Kurram Militia is a force mainly raised locally to preserve order in the Kurram Valley, which is only a semi-administered area and contains no other forces of the Crown except those connected with a small air base at Arawali near Parachinar. The Tochi Scouts and the Waziristan Scouts are intended to maintain British political control in North and South Waziristan respectively and to prevent raiding through Waziristan into the settled districts. They recruit only a very small proportion of local tribesmen. All three corps are officered by British officers seconded from regiments of the Indian Army.

The Khassadars are tribal levies raised for the Agency tracts to act as tribal police and to protect communications through their tribal territory. They are much more highly paid than either the Levies or the Police or Constabulary, partly because they have to find all their arms, ammunition and equipment, and partly in order to attract the best men to the service and to secure the good behaviour of themselves and their fellow tribesmen through fear of loss of a considerable income. Hitherto, they have been employed only in the Khyber Agency, where they number nearly 1,400 men, in the Kohat Pass, through which runs the road from Peshawar to Kohat, the next British district to the south, and in Waziristan, where the length of the new communications and roads makes it necessary to employ over 3,500 men.

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Up to the close of the year 1927-28 the Shiah Orakzais, who had been expelled from part of their lands in Tirah in the circumstances described in last year's report, had not succeeded in recovering their " Irredenta ". From time to time there were rumours that Mullah Mahmud Akhunzada contemplated attempting to drive the Shiahs out of their remaining lands also, but no attack materialised.

There was less raiding and counter-raiding along the Kurram border during 1928-29, but on the 4th July, 1928, an incident of some importance occurred. A Jaji Lashkar, estimated at 400 men, crossed the border into British territory, took up a position covering Walai China village, and drove off about 450 head of cattle. A Kurram Militia party, which turned out from a neighbouring post, was fired on by a covering party of Jajis posted just inside Afghan territory. Representations were made to the Afghan Government at Kabul and the necessity for the early assembly of a commission for the settlement of Jaji-Turi disputes was pressed upon them. There is, however, now no prospect of this until the general situation in Afghanistan improves.

* * *

Any historian of Indian North-West Frontier affairs in these days is justified in regarding Waziristan as still the most important part of the subject, and our introductory account of Frontier history and affairs will show the reason why. It is, therefore, particularly gratifying to be able to report that the great civilizing and pacifying policy which the Government have been carrying on for some years in this ancient storm-centre is still proceeding steadily towards its goal. On the whole, the year under report has been peaceful except for two incidents. In North Waziristan certain sections of the Madda Khel, at the instance of Malik Zangi Khan, proved recalcitrant, chiefly in the matter of carrying out their tribal engagement not to harbour outlaws. However, as the result of a blockade, the sections came in in the middle of January and reaffirmed their old agreements, which they had been showing a growing tendency to ignore.

* * *

In October the conduct of three minor sections in South Waziristan, *viz.*, the Giga Khel, Nekzan Khel and Kikarai, was unsatisfactory. They were warned to come in and settle the kidnapping and the other cases against them, but they refused and adopted a

truculent attitude. Action was taken against them by the Royal Air Force on 15th and 16th November, and resulted, with practically no casualties, in complete compliance with the Government's demands, of which the principal one was for the return of some kidnapped British Indian subjects.

There was no marked activity in the matter of education in tribal country during the year under review, but the Government of India have sanctioned an extensive scheme which, it is hoped, will be put into effect without delay for a five-year programme for the opening of schools in tribal territory. All accounts point to a growing demand in these areas, and particularly in the previously backward Waziristan, for the benefits of education.

There is nothing of particular interest to mention in connection with the five settled districts of the North-West Frontier Province.

* * *

On the 15th March, 1929, in the Legislative Assembly, a member of the Central Moslem Party moved a token cut in the North-West Frontier Province Budget to mark the wish of the Assembly for the introduction of constitutional reforms in the Province. The Foreign Secretary, Sir Denys Bray, gave a brief history of the case in illustration of its communal difficulties and stated that the policy of deliberate delay adopted by Government had been signally vindicated by events, adding that it was at last possible to discuss the question in the Assembly without raising a communal storm. He added that the Government now awaited the recommendations of the Simon Commission. The motion was carried by a majority of 67 to 34 votes.

Cordial relations continued to be maintained with the neighbouring kingdom of Nepal during the year under review.

* * *

The year was one of chequered fortunes from the economic point of view in Baluchistan, but satisfactory as to administrative conditions. Both the spring and the autumn sowings had to be restricted owing to lack of rain, whilst a severe plague of locusts did immense damage in the autumn. Many cultivators were hard hit, and Government advances had to be made somewhat freely in order to enable them to purchase seed, grain and cattle and improve their sources of water supply. Law and order was not, however,

affected by these calamities, and although the usual incidents associated with a wild and nomad population living on a sparsely inhabited border were not entirely absent, their number was far from excessive.

* * *

The grave occurrences in Afghanistan which ensued with startling rapidity on King Amanullah's efforts to enforce far-reaching social reforms after his return from Europe are a matter of common knowledge, and are in any case not the direct concern of India. In view of the peril to which the British Legation and Indian residents in Kabul were exposed and the danger of the disorders on the Afghan side of the border spreading to the tribes under British control, the dramatic course of the civil war was followed in India by Government and people alike with grave anxiety, and much sympathy was evoked by the vicissitudes of the Royal family. Though the tension on the frontier was great, the frontier administration succeeded in restraining Indian tribes from participating in the fighting. The story of the gallant behaviour of the British Legation (the British and Indian personnel of which, from the Minister, Sir Francis Humphrys, downwards, was found from the Indian Services) and of the magnificent work of the Royal Air Force in evacuating from Kabul large numbers of British Indian subjects, many foreigners, and finally on the 25th February, 1929, the Legation itself, has passed into history. His Excellency the Viceroy, at the opening of the Legislative Assembly on the 15th January, 1929, in referring to these stirring events spoke as follows:—

"In external affairs everything has been dwarfed by the upheaval in Afghanistan. Of the drama that has unfolded itself during the last few months in Afghanistan, I shall say nothing save this, that the policy of the Government is, and has been throughout, one of scrupulous non-intervention, and it is our earnest hope that there may be an early restoration of peace and order throughout the length and breadth of that country, and that India may again have on her North-Western border a peaceful, strong and united country for her neighbour. During this critical time we in India could not but be proud of the gallant bearing of the British Legation, of the firm control of our tribes by the Frontier Administrations and of the fine work accomplished by the Royal Air Force over the evacuation of women and children from Kabul."

The work of the Royal Air Force was concisely described in a speech by His Excellency the Commander-in-Chief in the Council of State on 6th March, 1929. His Excellency said:—

"The situation which arose in Afghanistan on December 17th, when the British Legation was definitely cut off from communication with the outside world—a situation fraught with deep anxiety for the safety of our countrymen, British and Indian, and of other foreign residents in Kabul—has happily been relieved by successful evacuations from Kabul, which were completed on February 25th, by the Royal Air Force. I wish particularly to refer to this unique achievement because, in my view, it is one of historical importance. This new arm of our Service has already proved its value in all forms of operations of war, but hitherto it has never been afforded an opportunity in peace such as arose during recent events in Afghanistan.

From the first day up to the conclusion of the evacuations the Royal Air Force has, in a most efficient manner, competed with the various stages of the situation. I would draw attention to the fact that this operation of the Royal Air Force was from every point of view a task of peace, involving risks willingly undertaken for purely humanitarian purposes and caried out with the consent and co-operation of the Afghan authorities at a time when they were involved in a difficult and dangerous situation.

From the very first day to the last our pilots went up to Kabul without a single weapon of any sort. The machines employed were Service machines, but everything in the nature of offensive weapons was stripped off; and the same applied to the pilots themselves, who carried no arms whatever—not even pistols.

I am glad of this opportunity to be able to convey to the Air Ministry and to the Air authorities in Iraq our grateful thanks for the promptitude with which they at once and unhesitatingly sent their heavy transport machines—Victorias such as the Honourable Members saw at the Air Force display in Delhi the year before last—to our assistance; indeed, the speed and punctuality with which these were despatched and arrived at Karachi is an outstanding feature of these evacuations. Later on, one of these machines was forced to land in very hilly country in Afghanistan during the process of evacuation. Fortunately, it was on its outward journey to Kabul and carried only its crew, Flight Lieutenant Chapman and Flying Officer Davis. They landed under the most difficult

conditions in a very mountainous area, and although the machine became unserviceable, these two officers were subsequently rescued by the Royal Air Force.

During the period from the 18th to the 23rd of December, our machines were constantly fired on by the tribesmen and struck by bullets; in fact, the first machine that arrived was shot down, but fortunately it made a successful landing on Sherpur aerodrome. The pilot, Flying Officer Trusk, who later rendered valuable assistance in the evacuations and remained throughout with the British Legation at Kabul, was assisted on landing in these difficult circumstances by the Afghan and Russian pilots located at Kabul, whose friendly co-operation I am glad to take this opportunity of acknowledging.

I would draw attention to the three chief aspects of these remarkable events. The first phase, which lasted from the 18th to the 22nd of December, was the period of the opening up of communications by the lighter type of machines with which the Royal Air Force is equipped. I have already stated that these operations were carried out under tribal fire; and during this period a total of eleven machines was used. They flew 3,630 miles.

The second phase consisted of the evacuation period, which started on the 23rd December and continued until the 25th February. During this period, both light and heavy transport machines were used. In all they made 86 journeys from Peshawar to Kabul and back, and flew a distance of 28,000 miles. These evacuations were carried out at a height of 10,000 feet under every conceivable climatic difficulty in one of the severest winters on record. When the final evacuation took place on the Sherpur aerodrome, there was a depth of 17 inches of snow on the ground.

The third aspect of these events was that connected with the rescue of Flight Lieutenant Chapman and Flying Officer Davis, whose Victoria machine, as I have already mentioned, was unfortunately compelled to make a forced landing. These officers were throughout treated well, not only by the villagers in whose area they landed, but also by Ali Ahmad Jan, who did everything possible to facilitate their onward progress to Jelalabad. They were received by the Naqib of Charbagh, who gave them every facility and hospitality. Due to his good offices and the active assistance of the British Consul at Jelalabad, and also to the fact that these two young officers, once they landed, used their brains and discovered an area of ground on which our machines could

land, messages were sent to Air Group Headquarters, Peshawar, stating that, provided machines were sent on a certain day to a certain place at a certain time, these officers would be permitted to return to India by air. Flying Officer Hancock, of No. 20 Squadron, was the officer selected to carry out this evacuation. At the first attempt his machine, in landing, hit a boulder and wrecked the undercarriage, rendering the machine unserviceable. This did not in any way deter the three young and keen officers—Chapman, Davis, and Hancock. They set at once to repair the damage, and in about three days time, Flying Officer Hancock arrived at Peshawar with Flying Officer Davis. There still remained Flight Lieutenant Chapman, and Flying Officer Hancock returned on a certain date and brought him away by air.

Thus the Royal Air Force not only completed the evacuation of men, women, and children from Kabul, to a total of 586 souls, but also evacuated their own pilots who had been unfortunately compelled to land. The House will realise in what an entirely impartial spirit the evacuation was carried out, when I mention that the British, French and Italian Legations were safely brought away; and the numbers included 343 Indians, 57 Germans, 49 Turks, 25 Persians, 23 French, 23 British and 19 Italians. The Nations concerned have tendered their grateful thanks for the care and help given to their Legations. The story of these evacuations is indeed unique. Except for the one machine that was forced to land, the Royal Air Force have carried out these evacuations without any loss of material. In referring to the successful completion of these evacuations, I must say how deeply grateful we all are to Sir Francis Humphrys for the part he took during those troubled and anxious days at Kabul. (Applause.) Had it not been for his personality, insight, tact, and diplomacy, which made it possible for the machines of the Royal Air Force to land at Sherpur, these evacuations could hardly have taken place.

It is, perhaps, invidious to mention names when all who took part did so well. I often wonder if, when one hears of successful operations carried out like this, one realises the extent of the efficiency which must necessarily be involved—in this case from the Air Officer Commanding down to the latest joined mechanic. A single weak link in the chain—a single error or neglect on the part of an officer or workman—might well have resulted in disaster and heavy casualties. And though, as I say, it may seem invidious to mention names, yet I feel I must take this opportunity of con-

veying to Air Vice-Marshal Sir Geoffrey Salmond, the grateful thanks of the Government of India for all that the Air Force have accomplished. (Applause.) Also, I cannot refrain from paying a tribute to Group Captain Mills; Squadron Leader Maxwell, who commanded the Victorias from No. 70, Squadron; to Flight Lieutenant Anderson, who was in charge of the great Hinaidi Transport machine; to Flight Lieutenant Prendergast and Smetham, who took a notable part in the opening up of communications; to Flying Officer Trusk, who, with Leading Aircraftsman Donaldson, was shot down and did such good work in Kabul; and to Flight Lieutenant Chapman and Flying Officers Hancock and Davis, to whom I have already referred.

As a matter of interest, I might mention that a Pathan accompanied each machine as an interpreter, one of these being a barrister who gave up his practice temporarily for this work. (Applause.)

The grand total of journeys carried out by the Royal Air Force on this great errand of mercy is 107, and they flew in all 33,930 miles, making a grand total of 57,430 miles, including the mileage flown by the Victorias on their journey from Iraq to Risalpur. I think I may say without fear of contradiction that the Royal Air Force undertook a great task on the 18th December, and that they have done it well.

I feel confident that I shall have the whole House with me when I emphasise that by no means the least important aspect of this achievement, culminating as it did in the withdrawal of the British Legation, was the practical demonstration to the world of the policy of scrupulous non-intervention in Afghanistan which Government have set steadfastly before them from the outset. and have consistently maintained."

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In the course of anti-slavery operations on the North-Eastern Border of Burma last cold weather 1,398 slaves were released in the Triangle and adjoining area. With the exception of a very few slaves who live in a remote area beyond the scope of these operations, the abolition of slavery in the Kachin Hills is believed to be complete. A pleasing feature of these operations is that over 25 per cent. of the emancipated slaves have, in this comparatively short space of time, taken good advantage of their newly bought freedom.

Expeditions are again visiting the affected areas to consolidate the work of the previous year's operations.

* * *

India's relations with Persia remained friendly throughout the year. The arrest on the charge of smuggling of an Arab "protected" dhow and crew at the Arab island of Tanb, to which Persia has from time to time made claims which the Arabs, and His Majesty's Government on their behalf, have consistently repudiated, caused feeling to run high among the Arabs of the Trucial coast, who threatened reprisals on the numerous Persian residents in their territory. Diplomatic representations at Tehran, however, procured the release of the vessel and crew, and relieved the tension.

During the year under review Dost Mohammad, of Bampur, the most powerful chief of south-east Persia was subdued by the Persian Government. Though nominally the Governor of Persian Baluchistan, he had been practically independent for many years and refused to pay any taxes. In these operations the Government of India co-operated with the Persian Government by providing war material and giving railway facilities. They also took steps to restrain the tribesmen on their side of the frontier from assisting Dost Mohammad. Operations started in October, 1928, and were brought to a successful conclusion about the middle of November with the occupation of Bampur and the flight of Dost Mohammad.

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The negotiations with the Persian Government regarding the aerial route to Karachi were successfully concluded during the year, and the through air service to Karachi has since been inaugurated.

On the 4th August 1928, the administration of the quarantine arrangements on the Persian littoral of the Persian Gulf was handed over to the Persian Government.

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The outstanding event of the year, so far as the Princes of India are concerned, was provided by the deliberations of the Indian States Committee. After spending the cold weather of 1927-28 in India, during which they toured extensively in several of the States, the Committee continued their activities in England. A number of Ruling Princes attended their sessions, and expressed their views on questions of import engaging the attention both of the States and of His Majesty's Government.

The report of the Committee was laid before Parliament on April 16th, 1929.

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Before turning to the second aspect into which Indian external affairs are divided, namely, the affairs of Indians overseas, we may profit by a review of the salient features of Indian emigration. Generally speaking this has been of two kinds. Unskilled labour has for very many years gone abroad either under the now obsolete system of indenture to Natal, the West Indies, Fiji, and Mauritius, or under some special system of recruitment such as was adopted for emigrants for Ceylon and Malaya. The second kind of emigration, which naturally followed the first when it had attained sufficient dimensions, is the emigration of skilled workmen and members of the professional classes. The whole emigration policy of the Indian Government was altered during 1922 by the Legislature and embodied in a new Emigration Act, which proclaimed assisted emigration of unskilled labour to be unlawful, except for such countries, and on such terms and conditions as may be specified by the Governor-General-in-Council. Any notification made by the Governor-General-in-Council under the Act must be laid in draft before, and approved by, both Chambers of the Indian Legislature. A Standing Emigration Committee composed of 12 members of the Legislature is appointed every year to advise the Government of India on all major emigration questions. Thus the Indian Legislature can now effectively control the organised emigration of unskilled labourers, whose conditions have markedly improved since the passing of the Act.

The number of Indians now settled abroad is approximately 2,400,000, of which no fewer than 2,300,000 are in the British Empire. It will be seen, therefore, that such problems as arise in connection with the settlement of Indians overseas are largely inter-Imperial problems, and of these the most thorny have arisen in certain parts of the Empire out of the question of the status of Indian settlers in the country of their adoption. In British Guiana, Trinidad, and Jamaica, Indian settlers have exactly the same status as any other British citizen. In Ceylon and Mauritius also, under their present constitutions, there is no discrimination against Indians on the ground of race. So far as Crown Colonies and Mandated Territories are concerned, the place where the interests of Indian emigrants and those of other settlers have come most into

conflict in recent years is Kenya, but perhaps the most delicate and difficult of all the negotiations which the Government of India have lately had to undertake on behalf of their nationals overseas have been those with the Government of South Africa.

It would be idle to deny that there are some parts of the British Empire where the treatment of Indians is not consistent with the position of India in the Empire or with their own status as British subjects. Naturally enough this is peculiarly irritating to proud and sensitive people like the Indians, and its re-actions on the internal politics of India have been serious in the past. The self-governing Dominions, of course, are themselves responsible for the way in which Indians within their confines are treated, but the people of India can hardly be expected to appreciate this fact dispassionately, and their irritation at the grievances of their fellow-countrymen in the Empire is apt to be expressed against Great Britain and the Indian Government. More particularly is this so when grievances arise among Indian settlers in the Crown Colonies, whose governments occupy a different position from those of the Dominions *vis à vis* His Majesty's Government. The importance to the whole Empire of the problems which have arisen in connection with Indian emigration has received recognition in successive Imperial Conferences from 1921 onwards, and a rapid survey of the recent history of Indian emigration affairs as far as they concern other parts of the Empire will help towards an appreciation of their present state.

The denial of their right to franchise, and the conditions under which they are allowed to immigrate, and obtain and retain domicile, and, in certain parts of Africa, their right to hold land, to enjoy trading facilities, and to escape from compulsory segregation, have been some of the principal grievances of Indian settlers in other parts of the Empire. As far as the Self-Governing Dominions are concerned, the Reciprocity Resolution passed at the Imperial War Conference of 1918 affirmed the right of each community of the British Commonwealth to control by immigration restrictions the composition of its own population, and this position has been accepted by reasonable Indian opinion, although it is not prepared to accept the policy of exclusion from those territories which have not yet attained Dominion status. Apart from the grievances referred to above, Indian opinion has of late protested against certain specific disabilities such as inadequate representation upon Legislative bodies, exclusion from the Municipal franchise

based upon a common electoral roll, and the non-payment to Indians of a minimum wage proportionate to the cost of living, to all of which Indian settlers have for long been subjected in some part or other of the British Commonwealth. The delegates to the Imperial Conference of 1921 agreed, South Africa dissenting, to a resolution, which admitted in principle the claim of Indians settled in other parts of the Empire to equality of citizenship, and the important suggestion that India should negotiate direct with South Africa in regard to the existing position, was also registered. Subsequent to the Conference, the Right Hon'ble V. S. Srinivasa Sastri, P.C., visited Canada, New Zealand, and Australia in order to consult with those Governments as to the method of putting the resolution into effect, and he achieved much success in directing the attention of those Governments to the disabilities to which Indians resident in those Dominions were subject.

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We have seen that in most of the Crown Colonies the position of Indian settlers is satisfactory. In the Fiji Islands certain grievances of the Indian settlers formed the subject of negotiations between the Government of India and Fiji, as a result of which the position of Indians in Fiji has been appreciably improved since 1924, notably by an increase of their representation in the Fiji Legislative Council and by the appointment of a special officer possessing Indian experience and language qualifications to act as Advisor to the Governor on matters affecting Indians in the colony. He is now given a seat in the Fiji Legislative Council.

* * *

In Kenya, relations between the European and Indian settlers have, on the whole, improved since 1923, when His Majesty's Government announced their general policy towards this colony. The question of franchise and the prohibition of Indian settlement in the Kenya Highlands, around which the bitterest part of the fight rages, remained untouched after the announcement, but the Ordinance restricting immigration was held in abeyance, though the right was reserved of enacting it if native African interests came to be threatened by the influx of immigrants. The policy thus enunciated was far from satisfying Indian opinion, either in East Africa or in India, but it did something to ease the situation, which was still further improved when the Indian community relinquished their attitude of non-co-operation and selected five members for the Legislative Council.

The question of the position of Indians in Kenya was again brought prominently to the fore in 1927 by the issue of another White Paper in July which announced that His Majesty's Government had authorised the Secretary of State for the Colonies to send to Africa a special commission to investigate the possibility of securing more effective co-operation between the Governments of Eastern and Central African Dependencies, and to make recommendations on this and cognate matters. This announcement excited serious apprehensions in India in regard to the future position of Indians in the colonies named in the paper. At the beginning of the Autumn Session of the Indian Legislature, the adjournment of the Legislative Assembly was proposed in order to discuss the situation which had arisen. A deputation drawn mainly from both houses of the Indian Legislature also waited on His Excellency the Viceroy on the 17th September, 1927, and represented the position of Indians in East Africa. One of the suggestions made by the deputation was that permission might be given for a small deputation appointed by the Government of India to go to East Africa in order—

(*a*) to make a general survey of these territories in relation to Indian interests therein, and

(*b*) to help the resident Indian community in preparing their evidence for the Commission.

The Government of India readily accepted this suggestion and, with the approval of His Majesty's Government, sent Kunwar Maharaj Singh, C.I.E., and Mr. R. B. Ewbank, C.I.E., I.C.S., to East Africa. These officers visited Kenya, Uganda, Zanzibar, and Tanganyika, and their services are understood to have been greatly appreciated by the resident Indian communities.

The personnel of the Commission was announced by the Secretary of State for the Colonies on November 14th, 1927, and was as follows:—

The Right Hon'ble Sir Edward Hilton Young, P.C., G.B.E., D.S.O., D.S.C., M.P. (Chairman).

Sir Reginald Mant, K.C.I.E., C.S.I.,
Sir George Schuster, K.C.M.G., C.B.E., M.C.,
G. H. Oldham, Esquire.
} Members.

H. F. Downie, Esquire (Secretary).

The Commission left England on December 22nd, 1927, and travelled *viâ* the Nile to Uganda, and thence to Kenya, Tanganyika, Zanzibar, Nyasaland, and Northern Rhodesia, visiting the chief centres and hearing the views of representatives of different sections of the community. The Commission also visited Salisbury for the purpose of conferring with the Government of Southern Rhodesia. They returned to London on May 7th, 1928, and their report was published on the 17th January, 1929. The report contains fifteen chapters and is signed by the whole Commission, the Chairman, however, signing "subject to additional recommendations," which are set out. There are also two reports on the Central African territories, one signed by the Chairman, and the other by the majority of the Commission. A summary of recommendations made by the Commission is reproduced in Appendix III to this review. The report is under the consideration of the Government of India at present, and they are fully alive to the importance to Indian interests of the decisions which His Majesty's Government may eventually decide to take in this connection. In his address to the Legislative Assembly on the 28th January, 1929, His Excellency the Viceroy announced that His Majesty's Government had agreed that before any decision was taken they would give the fullest consideration to the views of the Government of India on all matters affecting India.

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Another matter which engaged the attention of the Government of India and the public in India during the year 1927 was the report of the Local Government Commission appointed by the Government of Kenya in July, 1926, to make recommendation as to the establishment or extension of Local Government in Nairobi and Mombasa and their environs, and such settled areas as the Commissioners may consider to be suitable for the establishment of Local Government.

In particular this Commission was asked to advise upon the constitution, duties and powers of the local governing bodies which should be deemed suitable for the different areas concerned, the desirability or otherwise of establishing a co-ordinating authority at the headquarters of the Government, the relations of such authority, if created, with the local governing bodies, and the basis of the contribution to be paid from the Central Government's funds towards the expenses of the local governing bodies. The

report of the Commission was submitted to the Government of Kenya in February, 1927. A number of recommendations relating to Indians were made, including proposals involving a decrease in the proportion of Indian representation on the local bodies at Nairobi and Mombasa, and the creation of European elected majorities in these places. This caused much resentment among Indians in the Colony, and resulted in the abstention from the Legislative Council of four out of its five Indian members. The Government of India submitted representations to His Majesty's Secretary of State for India on this subject. On the question of unofficial representation on the Councils of Nairobi and Mombasa, a Committee consisting of European and Indian political leaders was appointed by the Governor of Kenya to discuss such clauses of the Local Government Bill as involved a difference of opinion between the European and Indian communities and to endeavour to arrive at an agreement. The amendments proposed as a result of the Conference which was held were all incorporated in the Ordinance enacted in October, 1928, but the Indian community in Kenya has decided for the present not to take advantage of the increased representation offered to it on these two municipal bodies until the question of introducing a common electoral roll has been settled.

* * *

We said above that some of the most difficult problems which have faced the Government of India in connection with their nationals overseas during recent years have arisen in South Africa. For some years after 1919 the position of Indians in the Union gradually worsened owing to a series of Legislative enactments dealing with Asiatics in the Union. In 1919, a Commission appointed by the Union Government recommended the retention of a law prohibiting the ownership of land by Asiatics in the Transvaal and the withdrawal of the right of acquiring and owning land in the Uplands of Natal. In 1923 the Class Areas Bill was introduced permitting the compulsory segregation of Asiatics in urban areas, but this lapsed in consequence of the unexpected dissolution of Parliament. In 1924 the Governor-General assented to the Natal Boroughs Ordinance, which prevented the further enrolment of Indians as burgesses. In 1925 the Mines and Works Act was proposed to be amended authorising the refusal of certificates of proficiency to Asiatics in certain occupations. The position of Indians in South Africa was thus being gradually worsened, which provoked anger and resentment in India. The Government of

India accordingly made representations to the Union Government and also sent a deputation under the late Sir George Paddison to South Africa. A better understanding between the two governments resulted from the work of the Paddison deputation, and on its return to India in May, 1926, the Government of India agreed with the Union Government that a conference on Indian questions should be held in South Africa in December, 1926. They, however, invited a deputation from the Union to visit India prior to this conference and study Indian conditions at first hand. The invitation was accepted, and a South African deputation paid a highly successful visit to India during September and October, 1926. Thereafter, an Indian delegation, selected so as to command public confidence in India and carry weight in South Africa, was warmly welcomed in the Union. The Conference was held in December, 1926—till January, 1927, and resulted in the attainment of a provisional agreement, which was later ratified by the two Governments. Under this agreement both parties reaffirmed the rights of the Union Government to provide for the maintenance of Western standards of life within its boundaries, and the Union Government recognised that Indians domiciled in South Africa and wishing to conform to Western standards of living should be enabled to do so. Those Indians who wished to leave South Africa were to be assisted by the Union to emigrate to India or elsewhere, but those who desired to return to the Union within three years were to be allowed to do so on a refund of the amount of the assistance received by them. Union domicile was to be lost after three years' continuous absence. The Government of India on their part recognised their obligations to look after such emigrants on their arrival in India. Wives and minor children of Indians permanently domiciled in the Union were to be admitted under the conditions agreed upon at the Imperial Conference of 1928. These conditions were (*a*) that not more than one wife and her children should be admitted for each such Indian, and (*b*) that each individual so admitted should be certified by the Government of India as being the lawful wife or child of such Indian. The Union Government further agreed not to proceed with the Areas Reservation and Immigration and Registration (Further Provision) Bill. The Government of India were asked to appoint an Agent to secure continuous and effective co-operation between the two Governments. This agreement was well received in both India and South Africa, though a certain section of European opinion in the latter viewed the agreement

with suspicion, and some even with unconcealed hostility. On the whole, we are justified in regarding it as a valuable contribution towards the solution of a highly complicated problem.

The friendly relations which were happily established between the Government of India and the Union Government of South Africa not only continued during the year under review, but grew in warmth and sincerity. Undoubtedly, one of the main contributory factors to this satisfactory state of affairs is the readiness displayed by both Governments to furnish proofs of their determination faithfully to fulfil their obligations under it. The Government of India lost no time in devising and setting in motion the machinery required in India to provide for the reception of those Indians who should decide to return to their homes under the scheme of assisted emigration, to protect their savings and bonuses, and to settle them in suitable occupations in this country. As a further proof of their earnestness to give effect to the terms of the agreement, the Government of India decided to send out as their first Agent in South Africa under its provision, the Right Hon. Srinivasa Sastri, P.C., a member of the Government of India's Delegation to the Cape Town Conference of December, 1926. His appointment was received with universal approval both in India and South Africa, and the Union Government, as a mark of their satisfaction at Mr. Sastri's appointment, extended an amnesty to all Indians illegally present in the Union.

On their part, the Union Government lost no time in introducing legislation to give effect to their undertakings under the agreement, and when Mr. Sastri arrived in South Africa in June, 1927, all that remained to be done was to take action under Part III of the agreement, that is, the part relating to the measures required for the general uplift of the Indian community in the Union. Most of the provisions of this part of the agreement concern the province of Natal, where the bulk of the Indian population in the Union is located, and the Union Government were not slow in moving the provincial administration to appoint a Commission, to enquire into the condition of Indian education in that Province, and to devise means necessary for its improvement. Co-operation with this Commission on the part of the Government of India was provided by the deputation from India of two educational experts—Mr. K. P. Kichlu, I.E.S., Deputy Director of Education in the United Provinces, and Miss C. Gordon, of the Madras Educational Service, to advise and assist the Commission in its investigations and deli-

berations. The help given by these experts has been much appreciated by the Commission, whose report has been published and whose views regarding the inadequacy of existing facilities for Indian education and the necessity for their expansion mark an important advance in the desired direction.

A notable feature of the present situation is the marked spirit of friendliness and good-will which now animates the Union Government in dealing with all problems affecting the domiciled Indian community. An example of this occurred in the year 1927, when a measure was introduced in the Union Parliament known as the Liquor Bill, of which one clause purported to prohibit the employment of Indians on any licensed premises—hotels, clubs, breweries, etc. The appearance of this clause, which threatened the livelihood of no less than 3,000 Indians engaged in such occupations, caused consternation, and it was no small relief both to these persons and their fellow countrymen in South Africa when it was announced by the Minister in charge of the Bill that it had been decided to drop the clause in question.

Much of the credit for the salutary measures referred to and the spirit of friendliness which they denote is due to the Right Hon'ble Srinivasa Sastri, the Agent to the Government of India in South Africa, whose consummate tact and transparent honesty of purpose earned for him the confidence of the European community, official and non-official alike, and an increasing measure of their sympathy and assistance in furtherance of the Indian cause. He not only brought about an improvement in the feelings existing between Europeans and Indians in the Union, but succeeded in rallying responsible Indian opinion in favour of working the agreement, a development the importance of which cannot be exaggerated. To illustrate his personal influence with the members of the Indian community it is only necessary to point to the most gratifying response which was made by them to his appeal for £20,000 for the purpose of opening a combined Teachers' Training and High School in Durban, an institution which will meet an urgent need and considerably ease the problem of Indian education in the province. The institution will, when it is erected and equipped, be handed over to the Government of Natal for management. The land for it has been provided by the Borough Council. Mr. Sastri deserves great praise for these results, which indicate a substantial advance towards the improvement of the condition of Indians in the Union of South Africa. Mr. Sastri handed over

charge of the office of Agent to Sir Kurma Venkata Reddi on the 28th January, 1929, and sailed the same day for India.

* * *

The affairs of British Guiana during the year hold some interest for us. In October, 1926, the Secretary of State for the Colonies appointed a Commission composed of Messrs. Roy Wilson and Snell, Members of Parliament to visit British Guiana and " to consider and report on the economic condition of the Colony," the causes which have hitherto retarded its development and the measures which might be taken to promote development. The Commission, among other matters, examined the effect of the present constitution of the Colony on its financial and economic condition, and came to the conclusion that the existing divorce of responsibility from power resulted, among other things, in bad trade and unsound finance. They, therefore, recommended that a strong local Commission should be appointed by the Governor to suggest ways and means for the revision of the constitution of the Colony of a kind which would ensure that the authorities finally responsible for the government of the Colony should have power, in the last resort, to carry into effect measures which they considered essential for its well-being.

The Secretary of State for the Colonies accepted this recommendation, and a local Commission was accordingly appointed in July, 1927, " to advise upon the steps which should be taken to confer power upon the Governor to carry into effect measures which he and the Secretary of State consider essential for the well-being of the Colony, whether by an alteration in the relative powers and in the composition of the Court of Policy and the Combined Court, or by the substitution of a new Legislative Council in which the Crown would possess powers of effective control over financial as well as other matters; and generally upon any other improvements, such as those suggested by the British Guiana Commission, which might be effected in the constitution." This Commission presented their report in September, 1927, in which they recommend certain substantial changes in the existing constitution of the Colony. In March, 1928, a Bill was introduced in the House of Commons empowering His Majesty's Government to alter the constitution of British Guiana by Order in Council. The Government of India consulted the Standing Emigration Committee of the Indian Legislature in this connection. They obtained full particulars as to the changes proposed in the constitution and examined them with great

care. They satisfied themselves that these changes did not involve any differentiation against Indians, and did not in any way infringe the provision of the special declaratory Ordinance which was passed by the Colonial Government in 1923, and which confers equality of status on all persons of East Indian race resident in the Colony.

* * *

As stated in last year's report legislation to give effect to the agreement which had been reached between the Government of Ceylon and the Government of India on the subject of a standard minimum wage for Indian estate labourers was passed by the Ceylon Legislative Council towards the end of 1927 as the Indian Labour Ordinance No. 27 of 1927. The various provisions of the Ordinance are in full operation now, and are expected greatly to improve the condition of the labourers.

* * *

In regard to Malaya, the Colony has, for the purpose of the standard wage enquiry, been divided into two classes or areas, *viz.*, (1) " fairly healthy and easily accessible " and (2) " somewhat unhealthy, and not easily accessible areas ", and the following standard rates of wages have been fixed and brought into force in the province of Wellesley (Straits Settlements) and the inland districts of Pahang (Federated Malay States), which were selected as the key areas to represent each of the two classes of areas referred to above.

	Adult Male Labourer. (Malayan dollar cents.)	Adult Female Labourer. (Malayan dollar cents.)	Working Child. (Malayan dollar cents.)
Category I.—Fairly healthy and easily accessible areas.			
(*a*) Province Wellesley (Straits Settlements).	50 a day.	40 a day.	..
(*b*) Districts of Klang, Knala Langat and Knala Selangur in the State of Selangur, Federated Malay States.	50 a day.	40 a day.	20 a day.
Category II.—Somewhat unhealthy and not easily accessible areas.			
Inland districts of Pahang (Federated Malay States).	58 a day.	46 a day.	..

The rates in question have been accepted by the Government of India as fair and reasonable, and their extension to the corresponding areas in the rest of Malay is now under consideration.

* * *

We may now conveniently turn to a review of Indian Military and Marine affairs during the year 1928-29. All who take more than a passing interest in Indian affairs are familiar with Indian aspirations in the matter of the military policy of the Government of India, and therefore it is unnecessary to go over ground which has been extensively covered in previous reports. Indian aspirations with regard to military policy are centred around two definite demands. The first is for the increased Indianisation of the commissioned ranks of the regular army, and the second is for the extension of the facilities which now exist for training Indians in the use of arms in the Territorial Force. Taking the latter demand first, the Indian Territorial Force now consists of:—

	Establishment.
18 Provincial Battalions	13,284
4 Urban Units	1,776
11 University Training Corps Units . . .	5,050
Indian Territorial Force Medical Branch . .	94

The Urban units and 3 new University Training Corps units were raised and one University Training Corps unit was expanded as a result of the recommendations of the Auxiliary and Territorial Force Committee.

Provincial battalions are each provided with 5 British officers of the regular Indian Army, and carry out all their training in camp, being embodied for this purpose annually. Urban and University Training Corps units are provided with one regular officer each (holding the appointment of Administrative Commandant or Adjutant), and carry out their training by periodical parades with a short annual camp.

The Provincial battalions are apportioned to Provinces as follows:—

Punjab and North-West Frontier Province	5
United Provinces	4
Madras	4
Bengal (Bihar and Orissa)	1
Bombay	1
Delhi	1
Burma	1
Ajmer-Merwara	1

The headquarters of Urban and University Training Corps Units are:—

Urban.—Bombay (2 Units), Madras, Allahabad.

University Training Corps.—Bombay, Calcutta, Allahabad, Lahore, Madras, Rangoon, Patna, Delhi, Nagpur, Karachi and Dacca.

The Provincial Battalions are intended to form a second line to the regular Indian Army, and their liability for military service is, therefore, a general one, (*i.e.*, they may be employed anywhere within the limits of India, and in an emergency beyond those limits by a special order of the Governor-General in Council). The liability of Urban units is confined to the Province in which they are located, while the University Training Corps units are purely educational, and have no liability for military service. Urban units were formed for the first time during the year under review. Recruitment in the case of University units has been satisfactory, but the response in the case of Urban units has, so far, been extremely poor, the enrolments being under ten per cent. of the establishments.

The recommendations of the Auxiliary and Territorial Force Committee, in respect to the introduction of a revised form of commission for officers of the Indian Territorial Force in lieu of the dual form of commission previously granted, have been given effect to. The Committee recommended that, as units of the Indian Territorial Force would, under the new organization, be administered on exactly the same lines as regular Indian Army units, platoon commanders should receive commissions granted by His Excellency the Viceroy in the ranks of Jemadar, Subadar, etc., but not honorary King's Commissions in addition. It was further recommended that officers of the higher grades in the Indian Territorial Force should hold commissions as 2nd-Lieutenants, Lieutenants, Captains, etc., these commissions to be granted by His Excellency the Governor-General in the name of His Majesty the King. Officers of the Indian Territorial Force have, with effect from the 1st September, 1928, been classified in the following two grades:—

(*a*) Senior grade officers, holding commissions with British designations of ranks; and

(*b*) Junior grade officers, holding Viceroy's commissions with Indian designations of rank.

Actually no higher grade commissions were granted in the period under review, but these are now being granted.

* * *

Since the publication of our last report important developments have taken place in carrying out the policy of the Indianisation of the commissioned ranks of the Indian Army. Twenty vacancies are now offered annually for Sandhurst, and a maximum of six each for Woolwich and Cranwell. Indian cadets, on being commissioned from Woolwich, will be posted to a selected company of Indian Sappers and Miners, a battery of Mountain Artillery or an Indian Signal Unit, and those from Cranwell to a unit of the Indian Air Force, which will be created at the time when the first Cranwell Indian cadets graduate. Up to five additional vacancies at Sandhurst are open to young Viceroy's Commissioned Indian Officers specially selected by His Excellency the Commander-in-Chief. These correspond to young non-commissioned officers of the British Army who are selected for training at Sandhurst in order that they may qualify for the grant of commissioned rank.

* * *

The examination for admission of Indian and Anglo-Indian gentlemen to the Cadet Colleges in England is now held twice annually in Delhi, in June and November, on the same dates as the corresponding examination in England. The examination papers are set and corrected by the Civil Service Commissioners in London. The Indian boys taking the examination compete among themselves for the vacancies reserved for Indians, and certain special papers suited to Indian conditions are included in the examination. The first examination under these new conditions was held in Delhi in November, 1928. The results were not altogether satisfactory. Fifty-seven candidates took the examination, but only five qualified for Sandhurst and one for Cranwell, while none qualified for Woolwich. The candidate who qualified for Cranwell also qualified for Sandhurst, which he had given as his first choice. In addition, two Indian boys qualified for Sandhurst by taking the examination in London. At the June examination this year, thirteen vacancies were to be offered for Sandhurst and six each for Woolwich and Cranwell. The examination is open to all suitable candidates in India and is not restricted to boys from the Prince of Wales Royal Indian Military College, Dehra Dun. This college, by the way,

is flourishing and will reach its maximum number of 120 cadets by the year 1932.

It is anticipated that the number of Indians competing for the vacancies in Cadet Colleges in England will steadily increase, and it is hoped that both the type and the standard of education of those who present themselves for examination will, as time goes on, reach the level required to fill all the vacancies reserved for Indians.

In accordance with the recommendation of the Indian Sandhurst Committee wide publicity is being given to the possibilities of a military career afforded by these openings. The various Universities and educational bodies addressed on the subject have undertaken to form Information Bureaux for the purpose of disseminating the information which will be supplied to them from time to time by the Government of India.

* * *

During 1928-29 troops were required to stand to in aid of the civil power on 28 occasions, chiefly as a precautionary measure on days of religious festivals, when inter-communal disturbances were expected. The only serious disturbances of the year happened in Bombay in February, 1929, when extensive rioting took place. Military picquets were compelled to open fire on more than one occasion, but the degree of force found necessary was small and few casualties resulted. A reference to these disturbances has already been made in the section dealing with strikes and riots in India. The Light Motor Patrol provided by the Auxiliary Force (India) was of considerable value during these disturbances.

* * *

An important decision which will be specially welcomed by that section of Indian politicians who are constantly complaining of the high military expenditure in India was made by the military authorities during the year. For a period of four years, beginning with the year 1928-29 and ending with the year 1931-32, the military budget will be stabilised each year at a figure of 55 crores, to which will be added the amount required to give effect to measures arising out of the recommendations of the Shea Committee on the Auxiliary and Territorial Forces. Any savings which may accrue within the total of 55 crores will be carried to a suspense account which may be drawn upon for expenditure in later years. This

arrangement has been adopted in order to enable the military authorities firstly to carry out a programme of mechanisation and modernisation of equipment necessitated by recent developments in military organisations, and secondly to repair certain deficiencies in equipment which are mainly due to the policy of retrenchment.

The progress made in the re-organization and mechanization of the Army in India, including the financial aspect, was explained fully in a statement made by the Army Secretary in the Legislative Assembly on the 5th September, 1928, which is re-printed in this book as Appendix No. IV.

* * *

On the 15th February, 1929, an important resolution moved by Dr. Moonje (Swarajist), was passed at the Delhi Session of the Legislative Assembly upon which there was a great deal of discussion. The resolution, as amended and finally passed, read as follows:—

> "This Assembly recommends to the Governor-General-in-Council, that with a view to remove the defects in the character training of Indian youths, as emphasised by the Skeen Committee, steps should be taken as early as possible to provide compulsory physical training, games, and drill, for Indian boys attending schools and colleges between the ages of 12 and 20, and to provide and encourage the use of miniature rifle ranges."

Amongst those who participated in the debate was Mr. G. M. Young, the Army Secretary, who defined the attitude of the Army towards the resolution in a statement from which the following extract is taken:—

"The attitude of the Government of India on the military side may be illustrated by quoting the recommendations on this subject by the Shea Committee, which the Government of India accepted."

"The University Training Corps and the Indian Territorial Force should be regarded as existing primarily for the purpose of spreading military training and the inspiration of military service among the manhood of India, in order to lay the foundations upon which a national army can be built up. Such a national army could only be created by gradual stages, and by a steady process of education extending over many years. This education should com-

mence wherever possible in schools; it should be continued in the Universities and colleges by means of the University Training Corps, and should be concluded in the units of the Indian Territorial Force. The growth of a national military spirit should not be forced by the application of any measure of compulsion."

" That is the attitude of the Government on the subject. With the aims and objects underlying this resolution we are entirely in accord. Where we differ is as regards the practicability of what is being proposed, and its utility as compared with the measures which are now in force.

As regards physical training, there is nothing to be said from the point of view of the Army Department. Then we come to military training. It is possible that if a measure of this kind were introduced there might be a wave of enthusiasm at the start which would carry a certain way. But sooner or later I think you would find a spirit of grave discontent fostered among students, and the measure of compulsion would either gradually peter out, or else it would culminate in something in the form of a strike—a strike, I may note, of students armed with rifles, bayonets and ammunition! My Hon'ble friend, Mr. Aney, wanted to limit the experiment when he found that the Government of India were not constitutionally capable of enforcing this measure in the provinces. He said " Let them start in their own territories." Well, Sir, if we carried out that plan and introduced compulsion in the University of Delhi, the only result would be that we would deplete that university, and neighbouring universities would profit by the measure."

Dealing with the question of expense Mr. G. M. Young said, " Who is going to provide the money? It is a question of supplying rifles in enormous numbers, uniforms, presumably, and all the equipage of camps. This expenditure, which the Army cannot possibly afford, could be spent far more usefully on what we regard as essentially the main purposes of defence. We could certainly not afford these amounts on what Honourable Members opposite themselves admit to be merely an experiment. There is also the question of custody, on which the Shea Committee laid great stress. If we are to have rifles disseminated in anything like the quantities postulated by this resolution, we should have to spend almost twice as much again as the value of the rifles in guarding them. We are entirely in sympathy with the objects underlying this

resolution. I do not think Honourable Members fully realise what has actually been done by the Government of India, both before and after the recommendations of the Shea Committee. The Shea Committee recommended that there should be no arbitrary limit fixed for the University Training Corps. Subject only, they said, to financial considerations, they should be allowed to expand up to their natural limits. In other words this means that we should provide facilities for any students who wish to undertake military training: not merely military drill, but military training. We have recently, as a result of the recommendations of the Shea Committee, started University Training Corps in three places where they did not exist before. We have expanded one company in one university, and we are engaged in expanding a company in another. We have added a new section, a Sapper and Miner Section, to the University Training Corps. Wherever we can see any signs of enthusiasm and desire to make use of these corps, we are prepared to consider favourably the provision of further facilities, subject only to financial considerations. Our object is gradually to build up an enthusiasm for national military service. The success of the movement varies in different universities. I should like to quote to the House an extract from a speech by Sir Geoffrey de Montmorency, when he was speaking as Finance Member in the Punjab Legislative Council last year. He said: 'The sanctioned strength of our Punjab University Training Corps unit is 637. I have gone into its present conditions with the officer commanding the corps. Enrolments at the beginning of the season are usually very satisfactory, but there is a tendency as the training season goes on for the numbers to dwindle down by about 400 more or less. For example, at the beginning of the present training year which has just passed, the officer commanding informs me that he recruited 280 men. These were sufficient to fill all the existing vacancies, but by March he had been obliged to strike 60 students from the rolls owing to their not attending the parades and drills. More had to be dropped out later. The results, therefore, fall somewhat short of what we desire. At this present moment although ten colleges, that is eight colleges of Lahore and two colleges in the muffassil, contribute numbers to the unit, the actual numbers of the unit are 469 against the sanctioned strength of 637.'

I submit, Sir, that the object of this movement would be altogether defeated by the introduction of the element of compulsion. The spirit is there, but it is not at present strong. It is weak.

We are trying to foster it; we are trying to coax it; we are trying to persuade students to undertake these national duties. If we are to apply now the element of compulsion I believe the thing would be ruined."

* * *

It will be recalled that the Royal Indian Marine was re-organised on a combatant basis with effect from the 1st April, 1928, and a reference was made to this in our last report. The enrolment of personnel was carried out under the provisions of the Indian Marine Act, 1887, during the year under review, and they are now being trained in the duties of the new force. Rear-Admiral Walwyn, of the Royal Navy, was appointed to command the reconstituted force, with the designation of Flag Officer Commanding and Director of the Royal Indian Marine, and arrived in India in November, 1928.

The three existing sloops were equipped with the necessary guns and mountings, while the fourth sloop, to complete the initial strength of the force, is expected from England by about the middle of 1930. It was decided that the officers, midshipmen and warrant officers of the re-organised service should wear the same uniform as that worn by similar ranks of the Royal Navy with distinctive buttons of the Royal Indian Marine, which bear the Star of India as well as the crown and anchor. Another important decision taken regarding the Royal Indian Marine by His Majesty's Government was that the ships of the re-organised service should use in peace time the same flags as in war, *viz.*, the Blue Ensign with the badge of the Star of India at the bow and the White Ensign at the stern. The new flags were flown for the first time on Armistice Day, 11th November, 1928. This compliment to the service does not, however, signify that the title and status of the force, or the powers of command of its officers, have been raised to those of a Dominion Navy. Full effect to such a development can only be given by legislation in India.

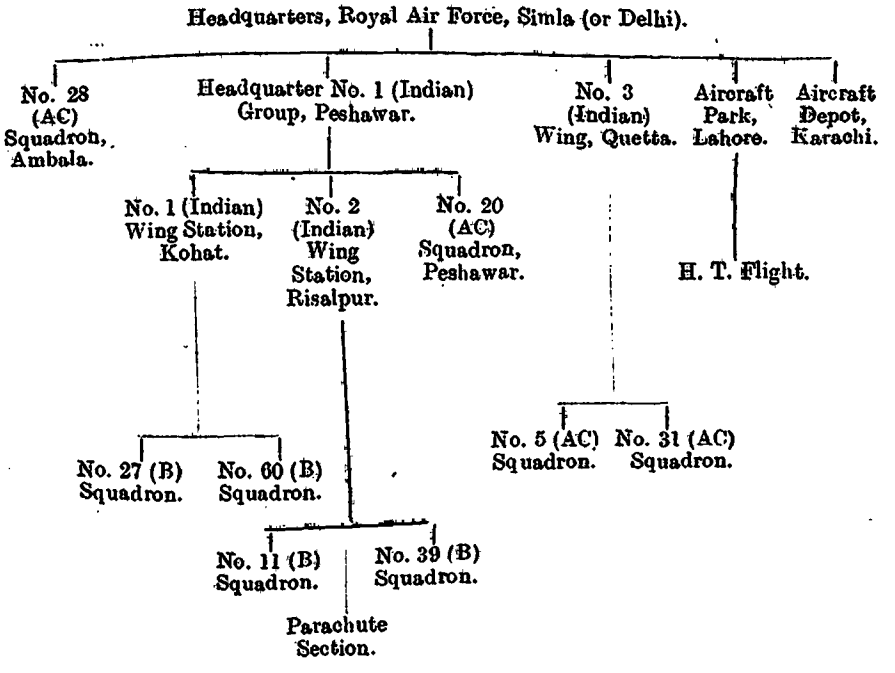
The first open competitive examination for the recruitment of Indians for the commissioned ranks of the new force takes place during 1929.

* * *

Important changes have taken place in the organisation of the Royal Air Force in India during the past year. On November 1st

Headquarters No. 1 (Indian) Group came into being at Peshawar and, simultaneously, No. 1 (Indian) Wing at Peshawar and No. 2 (Indian) Wing at Risalpur were disbanded and reformed as Nos. 1 and 2 (Indian) Wing Stations at Kohat and Risalpur respectively.

On January 19th two additional bombing squadrons, Nos. 11 and 39, arrived in India from England, as a permanent addition to the strength of the Royal Air Force in India. These squadrons are equipped with Westland Wapiti aeroplanes, and have been located at No. 2 (Indian) Wing Station, Risalpur. No. 27 (Bombing) Squadron left Risalpur and joined No. 60 (Bombing) Squadron at No. 1 (Indian) Wing Station, Kohat, No. 5 (Army Co-operation) Squadron was moved from Risalpur and attached to No. 31 (Army Co-operation) Squadron in No. 3 (Indian) Wing, Quetta. The new organisation of the Royal Air Force in India is now as follows:—


Headquarters, Royal Air Force, Simla (or Delhi).
No. 28 (AC) Squadron, Ambala.
Headquarter No. 1 (Indian) Group, Peshawar.
No. 3 (Indian) Wing, Quetta.
Aircraft Park, Lahore.
Aircraft Depot, Karachi.
No. 1 (Indian) Wing Station, Kohat.
No. 2 (Indian) Wing Station, Risalpur.
No. 20 (AC) Squadron, Peshawar.
H. T. Flight.
No. 5 (AC) Squadron.
No. 31 (AC) Squadron.
No. 27 (B) Squadron.
No. 60 (B) Squadron.
No. 11 (B) Squadron.
No. 39 (B) Squadron.
Parachute Section.

On October 14th, Sir Phillip Sassoon, Under Secretary of State for Air, accompanied by Air Commodore Longmore, Director of Equipment, Air Ministry, arrived at Karachi from Iraq in the "Iris" Flying Boat. The Under Secretary of State was met by the Air Officer Commanding, and an extensive tour was carried out by air embracing all Royal Air Force units in India. Two days

were spent in Simla, where Sir Phillip Sassoon and Air Commodore Longmore were the guests of His Excellency the Viceroy. After leaving Simla, the Frontier stations were all visited, and the party finally arrived back at Karachi on October 23rd, leaving for Basra in the "Iris" Flying Boat the following day.

* * *

It has only been necessary to undertake one minor bombing operation during the past year, namely against the Giga Khel and Nekzan Khel tribes. Bombing was carried out on November 15th and 16th, resulting in the complete submission of the tribes and acceptance of the terms imposed by the Government of India.

* * *

The most important feature of Royal Air Force operations during the past year, which may well rank as one of the most interesting achievements ever carried out by Air Forces, has been the evacuation of the British and other Nationals from Kabul during the Afghan rebellion. Operations commenced on December 18th, 1928, when normal communications between the British Legation and the outside world being cut, permission was obtained from the Afghan Government for a daily aeroplane to fly between Peshawar and Kabul. It was eventually decided to evacuate British, Indian and other Nationals from Kabul by air and, as only one Heavy Transport aeroplane, a Handley Page Hinaidi, was available in India, Vickers Victorias were flown over from Iraq to assist in carrying out this task.

On December 23rd, the first evacuation was successfully carried out, and 20 women and children of the British Legation were brought safely to Peshawar. On the following day 28 further women and children of different nationalities were similarly evacuated, and up to the middle of February, 1929, evacuations were carried out almost daily.

The operations were completed on February 25th, 1929, on which date 7 Vickers Victorias and 1 Handley Page Hinaidi evacuated 39 persons, including the British Minister in Kabul, Sir Francis Humphreys.

The grand total of men, women and children evacuated from Kabul to Peshawar during the period December 23rd to February 25th, was 586, a magnificent achievement which drew forth un-

stinted praise from Sir Samuel Hoare and others in the House of Commons a few weeks later.

The task undertaken and successfully carried out by the Royal Air Force is unique in the history of the world, and should do much to convince those who regard aircraft as purely destructive weapons that there are many and varied uses of a peaceful nature in which they can be utilised for the succour of human life and the salving of valuable property.

CHAPTER IX.

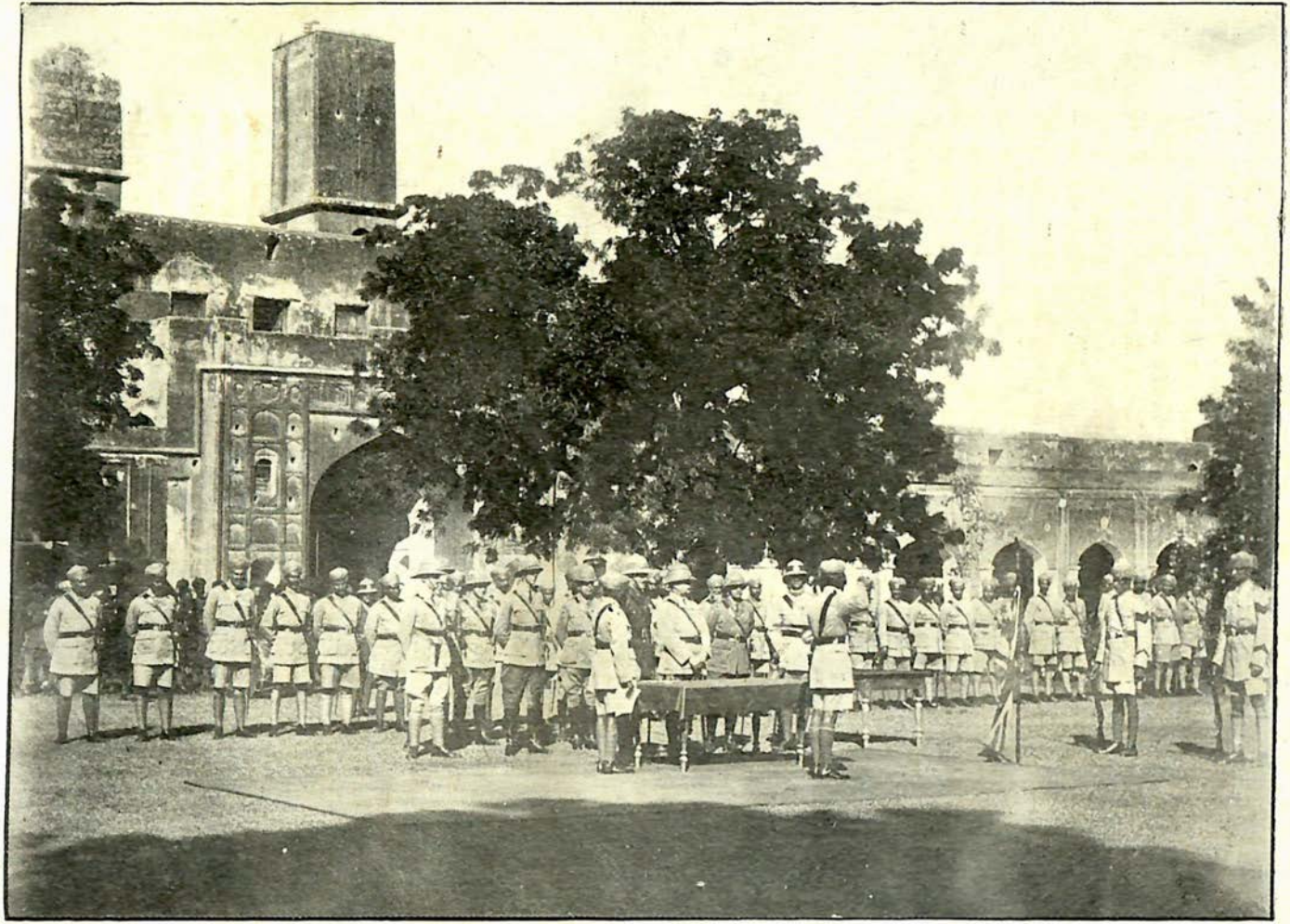
The Provinces.

(*i*) Law and Order.

The reader is by this time well aware of the fact that the present constitution of this country is based on the Government of India Act of 1919, a Statute of the British Parliament. The object of the Statute is to implement the historic declaration of August 20th, 1917, which announced the intention of His Majesty's Government to guide India in measured progress towards responsible self-government. The Act of 1919 was meant to take India along the first stage of this progress, and its provisions were formulated after enquiry into all the conditions of the problem, both in India and in England. Here we are concerned only with the division of functions under the Act of 1919—that is, the division between the Central and Provincial Governments, and, more particularly, with the arrangements according to which the provincial sphere is divided between the Governor acting with his Executive Council and the Governor acting with his Ministers.

By rules known as the Devolution Rules, made under the 1919 Act, the different subjects of administration were divided up between the Central and Provincial Governments. The division of work between the Government of India and the Provincial Governments follows certain broad and easily comprehensible lines. To the former belong Military and Foreign affairs, Tariffs and Customs, Railways, Posts and Telegraphs, Income-Tax, Currency and the Public Debt, Commerce and Shipping and legislation relating to Civil and Criminal Law—in short those subjects which must by their nature be administered by the Central Government. Practically all other important subjects of administration are within the sphere of the provinces.

The subjects of administration listed as Provincial subjects in the first schedule of the Devolution Rules underwent a further division into reserved and transferred. It is in this division that we find the principle now familiar to everybody under the name of dyarchy. Under the reformed constitution, therefore, the provincial executives now consist of two parts. The first part is



PASSING OUT CEREMONY AT THE POLICE TRAINING SCHOOL, PHILLAUR.

the Governor working with the Executive Councillors appointed by the Crown. The second is the Governor working with Ministers selected from Members of the Provincial Legislature. The first half of the Provincial Government administers the reserved subjects, and is responsible for them to the Government of India, and, ultimately, to Parliament through the Secretary of State. The second half of the Government deals with the transferred subjects and is responsible first to the Provincial Legislative Council and ultimately to the electorate. Among the most important of the subjects thus transferred to popular control are Local Self-Government, Medical Administration and Public Health, Education, all branches of Public Works except Irrigation, Agriculture, Fisheries, Forests in one or two provinces, Co-operative Societies, Excise, Registration, Industries, and various other items. Thus, a very large proportion of those subjects of administration on the development of which India's progress depends have now been made over directly to Indian control subject to the provisions of Section 52 (3) of the Act, which empowers the Governor of a province to dissent from the opinion of his Ministers if he sees sufficient cause to do so. Of the reserved subjects the most important are Police and Law and Order, Land Revenue, Irrigation and Forests in the majority of the provinces. The two latter topics have already been discussed in an earlier chapter so that here we need only confine ourselves to the work of the Police throughout India.

* * *

The existing system of Police in India has grown out of the system of constabulary police organised in Sind as far back as the forties of last century by Sir Charles Napier, who conquered the province in 1843. He drew his inspiration from the Irish Constabulary of those days, and his Sind Police may fairly be claimed to be the parent of the modern Indian Police.

All over India the Police are organised, disciplined and controlled according to the provisions of the Police Act of 1861, and by Police Rules made thereunder by Provincial Governments to suit the different conditions in the different provinces. In some provinces there are local Police Acts. The basis of organisation is provincial, and inside the province the administration unit is the district. At the head of the provincial force is an Inspector-General with a varying number of Deputy Inspectors-General

under him according to the size of the province, whilst the police force of a district is under a District Superintendent of Police who, in most provinces, is called simply Superintendent of Police. Every district is divided up into a number of police station jurisdictions each in charge of a "Station-house Officer," who is usually of the rank of Sub-Inspector. The police station, or *Thana*, is the basic working unit of the Indian police system. Every crime which happens must be reported in the first instance to the Station-house Officer within whose jurisdiction it has occurred, and on him devolves the duty of investigating the report, and, if possible, bringing the offender to justice. But the Station House Officer's duties are far from being limited by his work of reporting and investigating crime. In very many places in India he is the only representative of the Government for miles around, and almost everything that happens within his jurisdiction concerns him more or less closely.

* * *

Although the regular police system, as described above, is based on the model of the old Royal Irish Constabulary, and is thoroughly Western in conception and organisation, the police administration of the country contains certain indigenous elements of great antiquity and value. Over practically the whole of India the old pre-British village policeman still exists. The first duty of the village watchman is to report crime, but his functions, like those of the *Thanadar*, are many and varied and extend to the arrest of offenders, general aid to the police, surveillance over bad characters and suspicious persons, and the general supply of local information, particularly when an investigation is being held into a crime in his own village.

* * *

Having now seen what a Reserved Department is, and having learnt something of the organisation of the Indian Police, we can glance rapidly at the conditions in which they function. For English readers the word "police" conjures up a vision of the typical Borough force with its members serving permanently within the comparatively narrow confines of the Borough. If his thoughts go a little further to the county constabulary, he will think of the village policeman stationed in his little country village with his beat of a few square miles of countryside. He must

beware of applying this vision to India, because there things are very different. In the three presidency towns of Calcutta, Madras and Bombay, and also in Rangoon, the police are organised as a separate force for the city and are under the command of a Commissioner of Police. But everywhere else in India, however big a city may be, the police stationed therein are part of the police force of the district in which the city is located, and any one of the policemen serving there might find himself at any time transferred to a rural station twenty or thirty miles away. Outside the bigger cities there are few towns which have a police force for duties solely within the town. At the best, the town will be the headquarters of a police station jurisdiction, and will contain a police station with a varying number of constables in it, but the town will merely be the centre of an *alaquah*, that is an area, greater or smaller according to circumstances, containing a number of villages and hamlets, all of which have to be patrolled and guarded as closely and carefully as circumstances permit. The whole of British India is divided among these police station jurisdictions, the average personnel of which—certainly of the rural stations—probably does not exceed a dozen or so men, including the Station House Officer, the station clerk, and a head constable who acts as assistant to or deputy for the Station House Officer in investigating cases. It is easy to see, therefore, that the regular police can hardly be ubiquitous, and the importance of the village watchman and the necessity for the co-operation of village headmen and of the public generally become easily apparent. Few, if any, rural police stations jurisdictions can be properly patrolled by only ten or a dozen men, and this is the chief reason why it is possible for gangs of armed robbers, or dacoits as they are called in India, to continue their depredations for weeks or months before they are hunted down and either destroyed or captured.

The custom of hoarding wealth, whether in hard cash or in the shape of gold and silver ornaments, which is so prevalent in this country, is a frequent inducement to crime. Moreover, it must be remembered that there are many potential criminal elements in this country. From time immemorial wandering and criminal tribes have moved to and fro over the plains of India, and there are still very many of these tribes unreclaimed and unreformed. There are many who take readily to violent crime, either for adventure, or from revenge, or because of adverse financial circumstances, or out of sheer desire to get easy money. Cattle stealing is rife in

many parts of India because the Indian countryman's real wealth is in his cattle and he is often ready to pay ransom for his animals to the cattle thief rather than invoke the aid of the police, who may or may not be successful in recovering his animals for him. In fact, in all parts of India there are many persons who make their living by acting as middlemen between the cattle thief and his victim, and in the North of India there is a regular name for the ransom paid for stolen cattle. It is called Bhunga, and there are even places where what might be called a Bhunga market exists.

* * *

Among the events in the Punjab during the year under review may be mentioned the Dassehra celebrations at Lahore on October 23rd, which were marred by a tragedy. A bomb exploded among the returning crowds, killing ten and wounding 30 persons. The person responsible for the outrage has not yet been detected.

There was a marked decline of dacoity cases in the Punjab during the year—from 176 to 156. A special force arranged by the Patiala, Nabha and Jind States and the D.I.G., Eastern Range, operated against a gang organised by Gurdiali, who had created a reign of terror over a large area in the Eastern Range. Several other criminal gangs were successfully accounted for by the Punjab Police during the year. The following case of exceptionally good work on the part of the police has been selected from a number in the Punjab Police Report for 1928:—

In November 1925 important recoveries of bombs and revolvers were made in the notoriously criminal Chaks 233, 234 and 235 G. B. in the Lower Chenab Colony. In connection with these recoveries one Bhan Singh and three others were convicted. On 25th July, 1928, this Bhan Singh, who had recently come out of jail, and one Kehr Singh, who had also been concerned in the cases of 1925, appeared in Chak 234 about sunset. Kehr Singh was armed with a single barrelled smooth-bore gun, and Bhan Singh with a sword. They went straight to the house of Natha Singh, lambardar, who had assisted the prosecution in the 1925 cases, and murdered him, his two sons and a cousin. They then extorted money from two persons in the village, took possession of two mares and made off. The villagers remained either apathetic or terrified. Kehr Singh and Bhan Singh are reported to be originally residents of Patiala State, and it is suspected that they obtained

their arms from there. Inspector Safdar Ali, who had been the principal agent in successfully working out the bomb and revolver cases, learnt that Kehr Singh and Bhan Singh were closely associated with two other Sikh ex-convicts in Chaks 474 and 471, Police Station Samundri. Following up this clue, he was proceeding by lorry to Chak 474 with a small force when he saw two Sikhs ahead endeavouring to conceal themselves. The Inspector had his motor lorry driven across country as far as it could go towards these men and then alighted. As he did so, and before the rest of the party in the lorry had time to alight, he saw a man, whom he recognised as Kehr Singh, aiming a gun at him from behind a bush. The Inspector advanced alone, taking what cover he could in a dry water channel. Kehr Singh fired, but the shot went high and the cartridge jammed. The Inspector fired his revolver twice at Kehr Singh's legs and brought him down and captured him. The other Sikh, who turned out to be Bhan Singh, escaped but was caught by others of the party, and a third man, Jodh Singh, the " Badmash " of Chak 471 already referred to, was also caught. Kehr Singh had with him his single barrelled gun and 75 S. C. cartridges, and also Rs. 400 in notes, which had been stolen from Chak No. 254.

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It may not be generally known that all over India the Police have to be equipped with, and trained to the use of, fire arms. Except in the Punjab the Provincial Police Forces are divided into two categories—the armed police and the civil police. Ir the Punjab, however, no distinction is made between the two, and a percentage of rifles is kept in every district. All Punjab policeman have to be prepared to undertake duties which fall to the armed police in other provinces. The police in India are often faced with the possibility of having to conduct operations against well armed and desperate men to whom human life is of no account, and for the last few years extensive operations of a semi-military character have been in progress against desperados in several parts of India.

* * *

In Assam the year 1928 witnessed a decrease in crime with the exception of dacoities, the number of which was 2,683 during the year. Inter-provincial criminals are finding their way into this province in large numbers from Eastern Bengal, and consequently

the task of the police in preventing crime is growing more and more difficult. The most important work of the police during the year was the preventive measures adopted in Goalpara, a district bordering on Bengal, where great numbers of immigrants are settling. Criminals from the bordering Bengal district of Rangpur and Cooch Behar very frequently commit dacoities and other serious offences against property. The prevention of violence by labourers on tea gardens on five or six occasions was another piece of important work done by the Assam Police during the year. A story illustrative of the personal courage of a certain police officer may be quoted here: A dacoity was reported at Bijni, in the district of Goalpara, in which a considerable number of persons had been engaged and the victims treated with brutality, one having been stabbed with a spear, others with knives and some even burned with torches. The women in the house were ravished. Sub-Inspector Chandra Kumar Chakraburty, in the course of investigations, obtained from a village Chowkidar, who was himself identified as one of the dacoits, a list of seventeen members, all recent immigrants from Bengal, living in temporary huts in a neighbouring village. The Sub-Inspector, with a couple of constables and a few village chowkidars, at once raided the village at night, although the suspects were known to be armed and of a desperate character. He arrested twelve, the remaining five having already absconded. Although the dacoits offered no resistance, there was every reason to expect that they would do so.

* * *

Both in the Bombay Presidency and Sind the figures of reported crime during the year 1928 have fallen, but not to a very great extent. In the case of the Presidency proper this decline is probably due to the increased unwillingness of the public to report crime in areas remote from a police station. The stoppage of recruitment in the unarmed branch, ordered by Government in 1927, was continued during the year with the effect that the work was handicapped by the existence of a very large number of vacancies. The Criminal Investigation Department did good work during the year, and in respect of criminal tribes and professional criminals generally material progress was made. The possibilities of the "Modus Operandi*" system have been exploited with

* Almost all professional criminals in India (especially thieves and burglars) have characteristic methods of committing crime. The *modus operandi* system is a system of deduction of the authorship of the crime from the peculiar methods employed in its commission.

particular reference to burglaries, but it is too early yet to assess the results obtained.

A remarkable case in which the police acquitted themselves well during the year was the capture of two dangerous outlaws named Nasab, son of Nek Bakhat, and Dilwash, son of Ibrahim, on the border of the Nawabshah District in Sind, who had been responsible for several outrages in the Western Indian States and had evaded arrest for a long time. On November 6th, 1928, information was received from the Kathiawar Agency Police that four Makrani outlaws armed with ·303 magazine rifles were making for Makran *viâ* Sind. Later, the outlaws entered the Thar and Parkar District in Sind, after having lost one of their number in an encounter with the Jodhpur Police. The outlaws were closely pursued through that district by police parties, at first under Inspectors Kismatrai and Ghulam Rasul Shah, and later under Mr. Tahilram, Deputy Superintendent of Police. The pursuit in the cultivated parts of the district was both difficult and hazardous. One Police tracker Sikiladho was shot in an ambush by the outlaws. In the exchange of shots that followed one outlaw was shot dead and the other two made good their escape at night-fall. In the course of the pursuit two private persons received slight injuries; and on another occasion Mounted Constable Mohamed Khan received serious injuries. The outlaws kept closely under cover and eventually succeeded in reaching the Nawabshah border. Rao Sahib Tejumal Narayandas, Deputy Superintendent of Police in Nawabshah District, had received intimation on November 21st, 1928, of the march of the outlaws through the Nawabshah district, and with an armed party of ten policemen kept a close lookout for them. He made detailed arrangements to intercept the dacoits in every direction, with the assistance of Inspector Inayat Ali Khan and the Sub-Inspector of Tando Adam. Meanwhile the police party of the Thar and Parkar District, under Mr. Tahilram, joined the Nawabshah District Police, and the tracks of the dacoits were followed up to a ruined tomb in the town of Dalorai-ji-Nagri. Inspector Ghulam Rasul Shah went up to the tomb and called on the outlaws to surrender, but their reply was a shot which narrowly missed the Inspector and inflicted a superficial injury on a zamindar named Abdullah Pali. The only entrance to the tomb was a small narrow door hardly large enough to permit entry to a man. The dacoits could not, therefore, be attacked directly without the certainty of many casualties. Consequently arrangements were

made to surround the tomb on all sides throughout the night, and the next morning, as the outlaws refused to budge and were apparently attempting to construct loop-holes, the police made holes in the roof of the tomb, and through these poured in quantities of kerosene oil. The outlaws were then informed that unless they surrendered, fire would be set to the tomb. Under the influence of this threat they eventually gave themselves up. Two rifles, 36 loaded cartridges, 51 bullets, percussion caps, gun powder, blank cartridges and 19 tolas of gold were secured from them. More than 20 serious cases of murder and other serious offences are pending against these men.

* * *

There was a marked decrease in the volume of grave crime under all heads in the Madras Presidency during the year 1928. The only disorder worth mentioning was the riot in Madras City on February 3rd, the day on which the Simon Commission landed at Bombay, and that which occurred in July and August during the South Indian Railway strike, when the railway lines were tampered with in several places. Apart from this strike, labour was quiet during the year, and nothing of outstanding importance occurred. One of several instances of gallantry on the part of the police during the year may here be quoted. Head Constable No. 602 and three men of Batlagundu Station, Madura District, while on duty, learnt that persons wanted on warrant were hiding in the Manalur hills and that they were in possession of firearms. The head constable took with him four Kaller volunteers, and after marching all night surprised the gang in a remote and inaccessible spot in the hills. In the encounter that followed, two constables were wounded and one musket was lost, while one accused was shot dead. On this occasion the head constable displayed exceptional gallantry.

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The Central Provinces reports an uneventful year with a marked decrease in all classes of crime. Though relations between Hindus and Muslims remained strained there were singularly few clashes, and no political agitation of any importance occurred during the year. A Sub-Inspector of the Railway Police was awarded the King's Police Medal for arresting an armed Pathan on the Bhopal Railway Station platform. The relations between police and the public were satisfactory.

* * *

In the United Provinces there was an improvement in the communal situation. There were, however, serious communal riots at Oe, in the Muttra District, and Bibra Kalam, in the Moradabad District, and it was necessary to impose punitive police in several other districts. Crime remained on about the same level as last year, with a slight decrease in dacoity and a slight increase in burglary. The energies of the Special Police were devoted to carrying through the prosecution of numerous gang cases to which the operations of previous years have committed them. Out of five King's Police Medals conferred on officers and men of the police in the United Provinces, no less than four fell to the numbers of the Special Dacoity Police. The figures of officers and men killed or injured in the performance of their duties continue to be on a high level, namely 7 killed, 16 officers and 94 men injured. These figures give some indication of the demands which are being made on the courage and devotion to duty of officers and men, and of the satisfactory manner in which these demands have been responded to.

We may quote just one instance of gallantry among many which occurred in these provinces during the year. An armed Police Patrol—one naik and three constables—of the Muttra Armed Police, in the early hours of February 3rd, 1929, encountered a large force of armed dacoits who were on the point of raiding the house of a wealthy money-lender. The police were outnumbered by four to one, but immediately opened fire on the dacoits, who replied by inflicting a terrible wound on constable Kehri Singh, from which he died an hour later. In the meantime the naik had wounded and captured one of the dacoits who, however, was rescued almost immediately by his comrades. The small party of police followed up the dacoits and succeeded in recapturing the wounded dacoit. They made a second attempt at rescue in bringing the wounded man as prisoner to headquarters. Constable Kehri Singh was given a public funeral, which was attended by enormous crowds, and it was evident that his death had aroused much local sympathy.

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The figures relating to crime in Burma during the year under review compare very favourably with those for the corresponding period of the previous year. Dacoits, robberies and firearm cases showed a substantial decrease, while murders showed only a slight decrease. Arson and sabotage showed an increase during the year,

but there was no serious epidemic of crime prevalent. The report for the year includes a number of instances of gallantry performed by police officers, of which the following is one:—

On the 14th May, 1928, a registered criminal living in Payangekto village, Pegu District, informed the Kawa Police that some men were intending to dacoit a Chinaman's house in the village and also that some more men with guns were expected to arrive in the course of the day.

The police, after waiting all day, decided to surround San Nyun's house just before dusk. When they approached the house, the Sub-Inspector of Police, Tun Aung Gyaw, in his eagerness, drew ahead of the party and before they could surround the house, got on to the verandah and called out to the men in the house to come outside and surrender or he would fire. One man came out and sat down before the Sub-Inspector of Police, whereupon a shot was fired from within the house which struck the Sub-Inspector of Police, killing him on the spot. Another two shots were then fired in quick succession after which the dacoits got away from the back of the house in spite of being fired on by the Police. One villager and one policeman also received slight gun-shot wounds. A locally made gun and a double-barrelled gun by Cogswell and Harrison and a small quantity of ammunition were seized. Eight persons were suspected in the case, of whom five were arrested and convicted.

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From the foregoing record of the police activities in the various provinces of India it is clear that the typical day-to-day problems confronting the Indian police are those arising out of the inducements to crimes against persons and property in rural areas which are afforded by natural and social conditions, by the urge of primitive and unbridled passions, such as revenge and lust, by the inevitable paucity of regular police and by a still undeveloped sense of civic responsibility. At the same time there are other more subtle and sophisticated problems which have now to be solved by the detective forces of this country. Increased literary and technical knowledge has caused such crimes as bogus bank and company promoting, note and coin forging, confidence tricks and the like to take on an increasing popularity, whilst the growth of commercial houses, banks and other businesses has brought in its train all manner of embezzlements, forgeries, swindles and the

other like offences. The regular development of communications in India has enabled criminals to work over larger areas and has given rise to criminal organisations whose operations are inter-provincial, in fact sometimes even international, in scope. The Criminal Investigation Departments of the provinces are well abreast of modern conditions, and it should not be forgotten that many of the best improvements in the science of crime detection of recent years are the products of Indian brains. It is satisfactory to note that throughout India the district police are re-adjusting their ideas and practice to changing conditions. They are now employing extensively the *modus operandi* method of detection. Crimes such as burglary are not now investigated as individual cases. They are investigated in the mass. The characteristic methods employed are carefully noted and the movements of gangs are traced and the various individuals' peculiarities associated with them recorded.

During the calendar year of 1928 there was no striking increase in crime reported in any province in India, though inter-communal tension resulted in considerable loss of life in some parts of the country, but as reference has been made to these outbreaks in another chapter in this report there is no need to discuss the subject further.

CHAPTER X.

The Provinces.

(*ii*) THE TRANSFERRED DEPARTMENTS.

From time immemorial, institutions containing the germs of local self-government have existed in India, but they differed essentially from representative institutions as now understood. They were not constructed on the elective principle, were not correlated with the institutions of superior administration, had few definite functions, and were not regarded as representative of the locality by the State, which was inclined to ignore them. During the chaos which preceded British Rule in India, and, also, partly as a result of the administrative changes of the new regime, they disappeared almost entirely, and British administrators have, consequently, had to build up local self-government in India *ab initio*.

In 1882, Lord Ripon's government made an attempt to convert such local institutions as were in existence into school-houses for full self-government. They issued a resolution declaring that their object was to train the people in the management of their own affairs, and that political education should, as a rule, be given preference over departmental efficiency. This well-meant effort did not produce the results for which the Indian Government looked. It was inevitable that the infant local bodies should be at first under official guardianship, and thus the growth of initiative and self-reliance among those for whose benefit the system was devised was slow, a circumstance which lessened the attraction of the new bodies for public-spirited men.

With the inception of the Montague-Chelmsford Reforms in 1920 the control of Local Self-Government was handed over to responsible ministers, and as a result of this the development of these organisations has been greatly stimulated. Many fresh laws have been enacted, Municipal bodies re-constituted on more popular lines, municipal franchises extended and the powers of local bodies enhanced. These new changes also created a desire for experiment, and one of the most interesting of these was the revival of the old Village *Panchayat* or Committee of Elders, which in some places were amalgamated and called "Union Boards." The general plan

adopted was to place these ancient institutions on a modern legal basis and provide them with definite powers and functions. There was naturally a certain percentage of failures, due chiefly to the apathy and unwillingness to shoulder fresh taxation, but on the whole these experiments have proved popular and satisfactory. The new organisations are serving a useful purpose in the life of the people, though in some places more attention is given to the exercise of judicial functions than to important matters like sanitation and public health.

In 1926-27 there were 771 municipalities in British India with 19 million resident within their limits and an aggregate income of Rs. 16·83 crores. When it is remembered that Calcutta, Bombay and Madras alone contain three million people, the average Indian municipality is seen to be of only moderate size. The majority of the members of municipal bodies are elected, and the proportion of elected members tends to increase steadily. Municipal functions in India relate mainly to public health, safety, convenience, and instruction, but as only 10 per cent. of the population of British India live in towns it is clear that municipal administration cannot as yet effect the majority of the people and help to educate them in civic duties in a satisfactory manner. Therefore greater interest and importance attaches to the constitution and working of the District Board, which is actually a rural municipality. Nearly every district in British India possesses such a Board with two or more sub-District Boards subordinate to it. In Madras and Bihar and Orissa there are also Union Boards, while in Bengal there are both Union Boards and Union Committees. In 1926-27 District Boards and sub-District Boards, Union Committees with the Union Boards in Bengal combined, numbered 3,735. Of the nearly 43,200 members of these bodies about 70 per cent. were elected and 30 per cent. represented officials (*ex-officio* and nominated members). The tendency is for the elected element to increase. The receipts of these institutions (excluding Union Committees and Union Boards in Bengal) aggregated in 1926-27 to a little over Rs. 15·1 crores, and their chief activities were education, medical relief and civic works.

Big cities like Calcutta, Bombay and Rangoon naturally lead the way in municipal progress in India. Improvement and Development Trusts have been operating for years in these and other important cities, and have done much good. Loans have been floated for such objects as housing schemes, the abolition of slums,

the provision of open spaces, the alignment of streets and the segregation of offensive trades.

The enhanced powers of local legislatures in these organisations is reflected in increased activities in the organisations themselves. A great interest is taken in many parts of India in election to both Municipalities and District Boards. The non-co-operation movement has hampered progress in local bodies to a great extent, but in not a few cases the non-co-operation members have subordinated their political views to their municipal or Board duties. It is not possible, even at this stage, to form a true opinion on the post-Reforms working of Indian Local Self-Government. Financial stringency, political stress and lack of experience have all had their effect on the local bodies, and it is difficult to decide which of these factors have the most powerful effect.

We may now cite some of the more important instances of the progress of Local Self-Government in India during the year 1928-29 by mentioning some of the more important measures of Local Self-Government legislation undertaken during that period. In Madras, a non-official Bill to amend the Madras District Municipalities Act, 1920, the Madras Local Boards Act, 1920, and the Madras General Clauses Act, 1891, mentioned in the last year's report, was referred to a Select Committee, which entirely recast the Bill, restricting it only to the Madras District Municipalities Act, 1920, as Act I of 1927 had already dealt with the matter in regard to the Madras Local Boards Act. The main object of this Bill is to establish the right of all classes of people and of all communities, irrespective of caste or creed, to have access to and make use of all public streets, markets, tanks or other public places maintained out of the municipal funds and to render an obstruction to their use an offence punishable with a fine.

A non-official Bill to amend the Madras Local Boards Act, 1920, was also introduced in the Madras Legislative Council. It aimed at—

(*a*) doing away with the system of nominations;

(*b*) providing for the representation of the depressed classes and the Muslims by direct election through reservation of seats;

(*c*) providing that every District Board shall have an elected president unless the local Government have by notifica-

tion otherwise directed, and that a member of a legislative body shall not be eligible for election as president or vice-president.

Two other non-official Bills to amend the Madras District Municipalities Act, 1920, were introduced in the local Legislative Council and were referred to a Select Committee, which presented a consolidated Bill. The main objects of these measures are:—

(1) to abolish all nominations to municipal councils and throw open all seats to election, making adequate provision for the special representation of the minority communities on the basis of joint electorates and reserved seats.

(2) to provide for adult franchise in all municipal elections and to remove the sex disqualifications for membership of these bodies.

(3) to create an executive officer in all municipalities having an income of not less than Rs. 1,00,000 a year, and

(4) to provide that the elected chairman should vacate his office and the elected councillors their seats if a motion of non-confidence is passed against them.

Another non-official Bill to amend the Madras City Municipal Act, 1919, was introduced in the local legislature which aimed at bringing about a change in the constitution of the Madras Municipal Council, creating the office of a Deputy President and providing that the President shall be elected each year from the Hindu, Muslim and Christian community by rotation.

The Bombay Legislative Council passed a non-official Bill to amend the City of Bombay Municipal Act, 1888. The Bill was designed to provide for the representation of labour interests by election on the Bombay Municipal Corporation, and, having received the assent of Their Excellencies the Governor of Bombay and the Governor General, became law.

The previous sanction of the Governor General was refused to the introduction in the Bombay Legislative Council of a non-official Bill which sought to prohibit, under penalty of imprisonment and fine, the slaughter at Municipal houses of cows and certain other classes of animals.

Two non-official Bills to amend the Bombay Local Boards Act, 1923, were introduced in the local Legislative Council with the ob-

ject of lowering the franchise qualification for elections to District Local Boards and conferring the right to vote on income-tax payers and occupiers of residential buildings of a certain value.

Fresh sanction of the Governor General was accorded to the introduction of the Bengal Municipal Bill, which had received sanction in 1923 but which was not proceeded with till 1925, when the motion for leave to introduce it was rejected by the Bengal Legislative Council. The object of this measure was to revise and re-enact the Bengal Municipal Act, 1884.

The United Provinces Legislative Council passed a Bill to amend the United Provinces District Boards Act, 1922, with the object of making better provision for the administration and control of vernacular education in rural areas. The Bill was assented to by Their Excellencies the Governor and the Governor General, and became law.

A bill to amend the Punjab Village Panchayat Act, 1921, was passed by the Punjab Legislative Council during the year. The main objects of this Bill are:—

(*a*) to extend the administrative powers and supervisory obligations of panchayats, and

(*b*) to empower the local government to alter the limits of a village and modify the number of panches fixed for a panchayat.

The Government of India approved in principle the Punjab Government's proposal, referred to in the last year's report, regarding the imposition, with the previous sanction of the Governor General in Council, of *haisiyat* tax by District Boards in the province, and indicated the essential principle which should be observed before final sanction would be given to the imposition of the tax by any particular District Board.

The Burma Legislative Council passed a Bill to amend the City of Rangoon Municipal Act, 1922, which having been assented to by His Excellency the Governor received the assent of His Excellency the Governor General. The Bill was designed *inter alia* to provide for the grant by the Corporation of Rangoon of pensions, gratuities, or compassionate allowances to dependents of its employees, who may die while in service.

Certain non-official Bills to amend the Bihar and Orissa Local Self-Government Act, 1885, and the Bihar and Orissa Municipal

Act, 1922, were introduced in the local Legislative Council with the object of securing adequate representation for the Muslim community in the local bodies of the province by—

(*a*) providing for them in the case of District Boards separate electoral circles in each district consisting of Muslim voters only, and prescribing the number of members to be elected by each circle,

(*b*) introducing the principle of separate electorates for Muslims and non-Muslims in the Municipalities of the province, and providing that not less than 25 per cent. of the elected commissioners shall be Muslims,

(*c*) providing that both in the case of district boards and the municipalities either the chairman or the vice-chairman shall be a Muhammadan.

Fresh sanction of the Governor General was granted to the introduction in the Central Provinces Legislature of a non-official Bill to amend the Central Provinces Local Self-Government Act, 1920. The Bill aimed at:—

(*a*) making necessary changes in the Act to suit local conditions and to bring it into line with similar enactments elsewhere and with the spirit of the Reforms;

(*b*) fixing the elected element at four-fifths of the total number of members of the District Council or the Local Board;

(*c*) making the establishment of Local Boards within a District Council optional instead of compulsory, and diminishing the nominated or appointed element in them;

(*d*) relaxing the restrictions hitherto imposed upon the dismissed servants of Government and local bodies in respect of election to District Councils and Local Boards, and

(*e*) reducing the powers of Commissioners in local self-government matters.

The Assam Legislative Council passed a Bill to amend the Assam Local Self-Government Act, 1915, which received the assent of Their Excellencies the Governor of Assam and the Governor General. The main object of this measure was to empower Local Boards to impose, with the previous sanction of the local Govern-

ment within the limits of their jurisdiction, any tax included in Schedule II of the Scheduled Taxes Rules under the Government of India Act.

As a result of the ruling of the Lahore High Court that the imposition without the consent of the Governor General in Council of *haisiyat* tax by the District Board of Sialkot in the Punjab was *ultra vires* and illegal, the levy of the tax by the five District Boards of the North-West Frontier Province was regularised by the issue of a Validating Regulation (VI of 1928) until the 16th July, 1928, and the local Government was asked to submit proposals for the imposition of the tax in future.

The Government of India approved in principle of the introduction of an elective element in local bodies in the North-West Frontier Province, the details being left to be worked out by the Chief Commissioner with due regard to local conditions.

The Punjab Government reported that certain local bodies in the province had levied high rates of octroi and terminal tax on the import of hardened oils such as " Banaspati Ghi ", and raised the question of the powers of the local government and local bodies in the matter under the reformed constitution. The Punjab Government was informed that the levy of the tax at the high rates mentioned by them amounted to a prohibitive or protective duty and was *ultra vires* of the powers of taxation conferred by the Punjab Municipal Act, 1911. With a view to safeguarding the administration of the central subject of " External Relations," the Punjab Government and other local governments were instructed to refuse sanction to the imposition of octroi and terminal taxes differentiating between goods according to the origin of the goods and on goods of foreign origin in transit through India.

Sanction was granted to the raising by the Calcutta Corporation during 1928-29 of a loan of Rs. 86 lakhs in three parts at 5 per cent. interest, and the rate of growth of the Sinking Fund of these loans was fixed at $4\frac{1}{2}$ per cent. per annum.

* * *

Land questions have come into great prominence in India during recent years, and therefore a brief outline of the legislation proposed or passed during the year affecting land revenue or tenancy in the various Provinces may conveniently be set forth here.

The question of amending the Land Acquisition Act, 1894, in order to provide for compulsory acquisition of land for the proper housing of labour employed by industrial concerns was dropped during the year on the advice of the Department of Industries and Labour.

The Bills pending in the Provincial Legislative Councils of the Punjab, the United Provinces and the Central Provinces designed to give effect to the recommendation of the Joint Parliamentary Committee that the principles of land revenue assessment should be embodied in law were passed during the year.

The draft revenue law for Berar, which was referred back to the Berar Legislative Committee last year for reconsideration under the Berar Legislation Rules, was also promulgated by the Government of India with necessary modifications.

In pursuance of a resolution passed by the Legislative Council in 1921, the Government of Bengal appointed a Committee to consider and report what amendments were needed in the Bengal Tenancy Act, in view of the past experience and the changes in agrarian conditions. As a result of the recommendations of that Committee, and after consultation with the various interests concerned, an amending bill was introduced in August, 1928. The amendments were of a far-reaching character and evoked a good deal of opposition in certain circles. The bill, however, was eventually passed in September, 1928.

In Bihar and Orissa also the local Government have long recognised the necessity of amending the existing tenancy legislation. They introduced a bill in 1922, but were forced to drop it owing to considerable divergence of opinion between the various classes concerned and the impossibility of arriving at an amicable settlement. In September, 1927, a private Bill was introduced in the Legislative Council on behalf of the tenants, and was referred to a Select Committee, on the understanding that the landlords' party would also bring forward a Bill representing their views in a form which might, along with the tenant's Bill, constitute a basis for negotiations between the two parties. The Landlords' Bill was introduced in August, 1928, and was referred to the same Select Committee. The negotiations, however, did not result in a satisfactory agreement on all the points at issue, and the result was that the local Government had themselves to prepare a Bill on the lines which appeared to them to be fair and equitable to both sides.

This Bill is expected to be published shortly and will be introduced in the Provincial Legislative Council during the ensuing session.

The tenancy problem in the Malabar district has been engaging the serious attention of the Madras Government for some time past. In 1927 they appointed a Committee consisting of the prominent representatives of the landlords and tenants of Malabar to examine the whole question. The Committee submitted its recommendations in the middle of the year 1928, which were discussed again at a Conference convened by Government in the beginning of this year. The views put forward at this Conference on behalf of the landlords and the tenants of Malabar have received the best consideration of the local Government and the original recommendations of the Committee have been accepted with some variations. The conclusions have been embodied in a bill which is likely to be introduced at the next meeting of the Madras Legislative Council.

The provision of the Punjab Tenancy (Amendment) Act, 1927, and the Punjab Pre-emption (Amendment) Act, 1928, were extended to the province of Delhi in April, 1928, and October, 1928, respectively.

The latest year for which information concerning the working of local bodies in the provinces is available is that for the year 1927-28. In the Madras Presidency the total number of district boards was 25, and the privilege of electing their Presidents was enjoyed by 21 of these. The total number of Taluk Boards in the Presidency was 129, and all were presided over by non-officials. There were 469 Union Boards with an aggregate membership of 5,294 at the close of the year. The Karaikudi Union in the Ramnad district was constituted a municipality, and Alandur in the Chingleput district was constituted a Union during the year. Two Union Boards were abolished and six Union Boards were dissolved and directed to be reconstituted during the year. One municipality was suspended for the period of one year on the ground of incompetence, and one District Board was dissolved on being found incompetent to discharge its statutory functions.

In the Bombay Presidency most of the local Boards persistently avoided increasing the local fund cess or tapping other possible sources of revenue, and Government once again stressed the fact that any hopes of large additional grants were doomed to meet with disappointment, and that any extension of the number and degree of the amenities now provided could only be procured by discover-

ing new sources of income. In Sind (which is a part of the Bombay Presidency for administrative purposes) there was a wave of communal feeling, with the result that the proposals of certain Boards to impose additional taxation were treated as communal questions. One municipality at Vambori, in the Ahmednagar District, was abolished during the year, and a new municipality was formed in Manmad, in the Nasik District, with effect from January 1st, 1928. The municipalities of Nadiad and Thana, in the Northern Division, were reconstituted, while the municipalities of Mahableshwar and Satara Suburban, in the Central Division, and of Yamnur, Gudguddapur, Gokarn and Ulvi, in the Southern Division, continued to consist wholly of nominated members. A number of important public works were completed during the year, and 34 further properties were acquired in the Hornby Road-Ballard Pier scheme at a cost of Rs. 10·21 lakhs, and 23 buildings were demolished. The Tansa Completion works, designed to give Bombay City a constant 24 hours' supply of water, entered upon its final stage during the year. The District Local Board of Sholapur, in the Central Division, was superseded. Otherwise there is little to report on Local Boards administration in this Presidency.

Municipal administration in Bihar and Orissa during the year 1927-28 displayed no features of particular interest. The tax collections continued to be unsatisfactory, and there was no marked increase in income. In several instances party factions continued seriously to hamper the administration, though it is only fair to say that they were fewer than in previous years, and the examples of the subordination of municipal administration to politics were more rare. The number of municipalities remained the same as that of the previous year, namely 61, and there were 52 elected chairmen. The aggregate income of the year of all municipalities, excluding opening balances, decreased from 36·35 lakhs to Rs. 35·69 lakhs. Arrears in tax collections during the year increased from Rs. 4·29 lakhs to 5·20 lakhs, and the outstanding balances at the close of the year increased from Rs. 5·17 lakhs to 6·04 lakhs. No less than 23 municipalities had arrears to the extent of one-fifth or more of their current demands when the year closed. Two Headquarters municipalities, namely Motihari and Monghyr, closed the year with uncollected arrears amounting to 65 and 80 per cent. respectively of their current demands. The defective conditions of the roads, drainage, water supply and public health

services still continue to be the subject of criticism by inspecting officers, and this seems to be due in most cases to the absence of supervision of reliable officers.

Under the Local Self-Government Act, Government is empowered to constitute Union Committees with powers to deal with certain matters of education, roads, etc., for small areas. These committees are gradually disappearing since the passing into law of the Bihar and Orissa Administration Act of 1922, and during the year their numbers decreased from 51 to 34. Their place is now being taken by Union Boards constituted under the new Act. One hundred and fifty Union Boards were working during the year, but, partly owing to the rather haphazard way in which these Boards were constituted and partly from lack of supervision, their administrative works tended to be stagnant, and in many instances money was not utilised to the best advantage.

Municipalities in Bengal have a similar tale to tell of accumulated arrears, which is not to the credit of the executives. For instance, Howrah had outstanding balances of Rs. 5,63,120 for which no explanation has been given, while Dacca has arrears to the extent of Rs. 2,34,273, due mainly to litigation regarding the assessment. Other municipalities with arrears exceeding Rs. 25,000 at the close of the year were Mymensing, Barisal, Tollygunje, Santipur, South Suburban, Hooghly-Chinsura, Bally and Bankura. A general unwillingness to adopt stringent measures is largely responsible for these heavy accumulations of unpaid taxes, but there are other factors also. There is no such system as there is in Madras and Bihar and Orissa for recovering from the persons responsible amounts that have been lost through their negligence. The provision of satisfactory water supplies occupied a large share of attention among Bengal municipalities during the year. There are now 28 municipalities which have their own water works, and of these only five date prior to the year 1900. Seven municipalities in the Hooghli-riparian area obtained their supplies from local mills, while other municipalities have important schemes on hand for the construction of new water systems. Tube wells have proved a successful and cheap source of water supply in certain soils, and a large number of municipalities have decided to construct such wells. The future municipal administration of Bengal, on the whole, may be regarded with hopefulness, and doubtless as the years go on experience will dictate the wisdom of managing local affairs more methodically than has been the case in the

past. There were 82 local Boards with a total of 1,339 members during the year under review. Union Boards continued to maintain primary schools in certain districts, and a good deal of useful spade-work in respect of primary education in rural areas was done during the year. The education of the rural population and the advantages of local self-government are being steadily maintained by Circle and District Board officers, and such opposition as made itself felt at the commencement is gradually disappearing.

The financial position of most of the District Boards in the United Provinces continues to be very disquieting. No fewer than 12 had debit balances in 1927-28, and in the case of 32 Boards their recurring expenditure exceeds their income. These Boards are, of course, living on their reserve funds which is all the more serious when it is realised that their finances are comparatively inelastic and the amounts they are capable of raising are insignificant. The spirit of communalism, lack of experience and the inability of members to resist the temptation to interfere in matters of detail instead of contenting themselves with the control of policy are all factors which are hampering successful administration. Whilst very little interest has been shown in public health, medical, sanitation and road problems, all the Boards have shown a keen interest in education. No less than 19 Boards have framed schemes for the application of compulsory primary education to selected areas, and others have the matter under consideration.

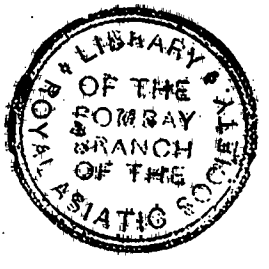
The condition of Municipal Boards in the United Provinces showed considerable improvement in 1927-28. The average attendance of members at meetings, on the whole, was satisfactory, though there were some notable exceptions. In Meerut, for instance, the total number of meetings was 101. Of these 24 proved abortive for want of quorum, and 48 had to be adjourned. The total expenditure of Municipal Boards was greater than their income, though much less so than in the previous year. There were some notable improvements in the public services, of which the introduction of four electric supply systems is an instance. Fifteen towns now have their own water supply systems, and in some of the larger towns a regular programme for the construction of bitumen bound roads has been commenced. Maternity and child welfare work is progressing rapidly, and there are now 46 maternity and child welfare centres.

Opinions on the working of village panchayats in the United Provinces differ widely. The quality of the judicial work done by

these bodies has not, however, been seriously called in question, though the hope that the panchayats would relieve the regular courts of some of their work has not been fulfilled. Reports are, on the whole, however, favourable, and there is a wide-spread acceptance of the view that the movement has come to stay.

The year 1928-29 was the fifth complete year since the District Councils were established in Burma. There were 28 District Councils 276 Circle Boards, 11,790 Village Committees, 28 School Boards, 24 Deputy Commissioners of Local Funds and 86 Hospital Funds. Circle Boards have not yet taken an effective part in the scheme of rural self-government in Burma, and although certain District Councils delegated certain powers to their subordinate Circle Boards no Circle Funds were established during the year owing to lack of the necessary finance, and consequently the Circle Boards had no independent resources for expenditure on local subjects. About half the number of District Councils failed to maintain the roads in good order, chiefly owing to the lack of adequate engineering staff. Progress was, however, made in the direction of education. One hundred and ninety-one new Vernacular Schools were opened in backward localities with the aid of special provincial contributions. There were no important changes in the administration of hospitals and public health in rural areas. The administration of Municipalities in Burma during the year under review was satisfactory. Insein and Pegu Municipalities have shown initiative in providing for free primary vernacular education by each opening a free school. The local government are preparing a Bill to provide free and compulsory primary education throughout Burma. Progress was made with water and drainage schemes, and several new hospital buildings were completed during the year.

Education and medical relief formed the chief planks in the activities of the Municipalities and District Boards of the Central Provinces during the year 1927-28, and absorbed about 20 per cent. and 7 per cent, respectively, of the former's income, and 47 per cent. and 7 per cent, respectively, of the latter's income. There was a large increase in the number of schools during the year—from 85 to 4,173—and many untrained teachers were replaced by trained men, and their pay and prospects improved. Compulsory education was introduced in 84 villages and two towns. The number of dispensaries transferred to municipal committees and district councils was 28 and 75 respectively. Party feelings manifested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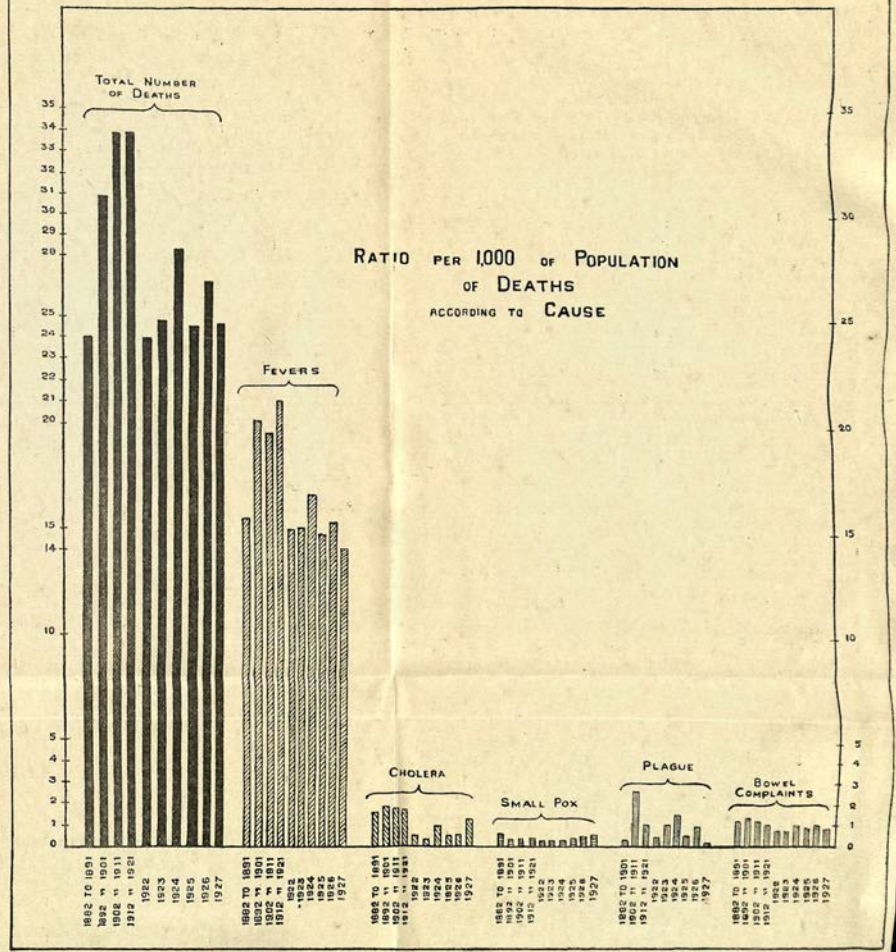
RATIO PER 1,000 OF POPULATION OF DEATHS ACCORDING TO CAUSE
TOTAL NUMBER OF DEATHS
FEVERS
CHOLERA
SMALL POX
PLAGUE
BOWEL COMPLAINTS
1882 TO 1891
1892 " 1901
1902 " 1911
1912 " 1921
1922
1923
1924
1925
1926
1927

themselves in certain municipalities, while in others the spirit of communalism was rampant. A Bill to remove certain difficulties noticed in the working of the Central Provinces Municipalities Act was introduced in the Legislative Council and referred to a Select Committee during the latter part of the year.

Considerable progress was made by all the municipalities in Assam and attention was given to water supplies, road building, and sanitation on a very commendable scale. The expenditure on lighting and education was increased, and with few exceptions the general financial position of the Boards was satisfactory. Seven municipal institutions were in debt to the government at the close of the year, but, with the exception of Sylhet and Nowgong, which had balances of loans outstanding of Rs. 72,961 and Rs. 31,661 respectively, the liabilities were not heavy. The number of village authorities in the provinces decreased by one during the year, and their total income fell from Rs. 74,000 to Rs. 71,000 and the total expenditure from Rs. 75,000 to Rs. 73,000. The village courts and panchayats continued to be popular and did useful work, particularly on the civil side. The constitution of the 19 Local Boards in the province was thoroughly revised during the year, in conformity with the provisions of the amended Act, the non-Muhammadan representatives being increased by 33 per cent., the Muhammadan by 64 per cent, and the planting interests by 5 per cent. The enlarged and re-modelled Boards commenced their term of office on April 1st, 1928.

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Turning now to the vastly important subject of Public Health, we may begin by drawing attention to the graph on the opposite page, from which some indication may be had of the scope of the problems which face the doctors in this country.

The distribution of the population of India, the general poverty, and the backwardness in education make it inevitable that all improvement in sanitary conditions should be almost entirely the work of the State. Climatic and other natural conditions render the people of India prone to many devastating epidemic or contagious diseases which have been stamped out in more fortunate countries. Certain diseases like malaria, hookworm, and kala azar are endemic in many parts of the country, and although these are all preventable, their prevention requires an amount of labour, financial expenditure, and determination, which, in existing circumstances, can hardly be looked for from the people themselves. Municipali-

ties and other units of local self-government are, as we have seen, taking an increasing share in this work, not only by providing medical relief, but also by undertaking schemes for water supply, and by instructing children and parents in elementary notions of hygiene. But, in addition to adverse natural conditions, social and religious customs and superstition place obstacles in the way of the sanitary reformer. As we so often find in other matters, what in the west is one problem is in India a bundle of problems, each one having its roots deep in traditional usage or religion. Progress, therefore, in this country is necessarily slow and made against greater obstacles and with greater expenditure of money and labour. Yet in spite of all these things it cannot be contested that conditions of public health improve in India if not from year to year, at any rate from decade to decade. Since the regular census in this country was started half a century ago, the population has grown steadily. The greater part of this growth is no doubt due to the internal and external security and the freedom from famine which followed the establishment of British rule, but some credit is due to the spread of medical facilities and the strengthening of the organisations which deal with epidemics of plague, malaria, and other destructive diseases. In the past, every important fair or other crowded gathering was a likely source of disease and death to many thousands, but now-a-days medical arrangements either prevent outbreaks of disease on these occasions or immensely minimise their effects when they cannot be prevented. The number of hospitals, dispensaries, and trained medical practitioners grows yearly and the gap between the demand and the supply of medical facilities in India continually narrows. Every housing, water, and other sanitary scheme undertaken by a municipality or other body is a valuable contribution to the cause of public health and sanitation, and such schemes show a regular increase in number. Much is hoped for from the education of the rising generation, and particularly the girls, in elementary rules of hygiene. In every province earnest efforts are now being made to cope with the adverse conditions outlined above.

During the year 1927 the Government of Madras sanctioned the appointment of health officers in eight municipalities, and thirty-four of the eighty-one municipalities in the Presidency now have their own health officers. The Public Health Department was further expanded. The project to investigate the prevalence of malaria was consummated by the creation of a special establish-

ment for a period of two years, and systematized investigations in four badly affected areas have already been completed by this body. A geographical survey of the incidence of cholera was completed during the year, and experiments were carried out to determine the relative efficacy of two anti-cholera vaccines, one of which is administered by inoculation and the other by the mouth. A geographical survey of plague was also completed during the year. Nearly two million people were vaccinated, and the success rate of 96 per cent. for primary cases shows that the lymph in use is of a very high protective value. The National Health and Baby Week is steadily growing in popularity and has come to stay as an annual function. Nearly 30,000 lectures were delivered during the week, and nearly Rs. 1½ lakhs was collected and spent.

The scheme for the expansion of medical relief in rural tracts was further developed during the year by the sanction of 40 new dispensaries. Facilities for dispensing anti-rabic treatment were extended to several mission hospitals and dispensaries throughout the Presidency. The training of nurses has been revised and the syllabus prescribed by the General Nursing Council of England and Wales has been adopted with modifications suitable to this Presidency. Lastly, considerable progress was made in the campaign against hook-worm during the year.

In Bombay, except for a somewhat severe epidemic of cholera, the health of the Presidency as a whole compared favourably both with the previous year and the quinquennial mean (1922-26). About 2,00,000 deaths were registered as due to fevers, malaria alone accounting for a little over 45,600. Additional doctors and dispensaries were provided to cope with this disease, and a generous distribution of free quinine was made. Infant mortality received a setback during the year as compared with the previous year, and the birth-rate exceeded the death-rate by 11·13 per thousand. The Presidency was visited with a severe epidemic of cholera, and over 26,000 deaths were recorded. The number of hospitals and dispensaries and the number of patients treated in them showed slight increases during the year.

In the United Provinces the Provincial birth rate in 1927 increased by 2·52 as compared with 1926. The death rate, *viz.*, 22·59, was the lowest on record, due to a low fever mortality. No less than 152 infants out of every 1,000 born are said to have died during the first year of life. A total of 28,285 deaths from

cholera, 7,894 from small-pox, 15,570 from plague, 786,552 from fevers and 12,186 from dysentery and diarrhœa were registered. The Provincial Hygiene Institute was engaged on teaching anti-mosquito work, research, and the production of cinema films, etc.; a public health exhibition was also organised. The malaria branch carried out six malarial surveys and held a malaria class. The sale and distribution of quinine was vigorously pushed. The District Health Scheme was working in 26 districts. Ten whole-time medical officers for the inspection of schools were appointed at the ten centres with large school populations, *e.g.*, Allahabad, Lucknow, Agra, Benares, Cawnpore, Meerut, Bareilly, Gorakhpur, Fyzabad and Jhansi. The local government's grant for maternity and child welfare work, etc., was increased from Rs. 50,000 to Rs. 59,600. Six new welfare centres were opened, bringing the total number to 33. Baby weeks were held at 22 places.

The birth rate of Bengal rose slightly, *i.e.*, from 27·4 per mille in 1926 to 27·7 in 1927, and the death rate from 24·7 to 25·6. This resulted in an increase of 2·1 per mille in the population of the Presidency. The death rate for 1927 showed an excess of 3·6 per cent. in comparison with the previous year. The mortality from cholera (118,377) and small-pox (42,514) practically doubled, whilst that from dysentery and diarrhœa (29,358) and respiratory diseases (32,911) showed slight increases, and that from fevers (789,006) and other causes declined to some extent. The cholera death rate increased by 92·3 per cent. as compared with the previous year, while the percentage of deaths to total mortality has not been so high during the last 20 years. No less than 12,99,630 c.cs. of anti-cholera vaccine were issued, or 5 times as much as in 1927 (*viz.*, 256,000 c.cs). The anti-cholera inoculations performed were practically 14 times as many as in 1926, which shows the ever increasing popularity of this measure. The attack on sources of infection was maintained, and the Public Health Department disinfected 39,356 wells and 33,550 tanks. The District Board staff and the publicity officers distributed posters, and gave lectures and magic lantern demonstrations. Small-pox was responsible for 42,514 deaths (25,548 in 1926). The epidemic is the continuation of the quinquennial outbreak which started towards the end of 1924. Opposition to vaccination in normal times amongst many communities in the Presidency accounts for the accumulation of unprotected persons and the resultant small-pox epidemics. The total number of deaths reported from fevers in 1927 was 789,006

Number of Deaths according to Cause from 1872 to 1927

(Decennial Averages from 1872 to 1921)

In Thousands

Total Number of Deaths
Deaths from Cholera
" " Diarrhœa
" " Small Pox
" " Fevers
" " Bowel Complaints

8,500 8,000 7,500 7,000 6,500 6,000 5,500 5,000 4,500 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500

1872 to 1881
1882 to 1891
1892 to 1901
1902 to 1911
1912 to 1921
1922
1923
1924
1925
1926
1927

In Thousands

against 822,774 in 1926. The rate per mille fell from 17·7 to 17·0, and the percentage of fever deaths to total mortality from 71·5 to 66·3. Malaria alone contributed 54·4 per cent. of the fever mortality. The campaign against malaria took the form, as before, of extensive and wide-spread distribution of quinine. The anti-malarial schemes in connection with Banka Valley, Singaran-Toposi and Jangipur were being carried out. A number of anti-malaria societies continued to work and a few additional societies were organised. The mortality from kala-azar showed a further decrease, the reduction in the provincial rate being 19·4 per cent. The campaign against this disease still continues. The year under review surpassed all past records for school hygiene work done by local bodies in the mufussil. Grants were made to the various local bodies for starting 100 classes of 10 *dais* each for the training of *dais*. The public health laboratories at Calcutta and Dacca and the municipal laboratory in Darjeeling examined over 12,000 samples (chemical, bacteriological and others).

The health of the province of Bihar and Orissa continued to be generally good during 1927, although a widespread epidemic of cholera broke out in the month of April. Energetic preventive measures carried out in connection with the Rath-Jatra festival at Puri were successful in limiting the cases of cholera to a comparatively small number. Anti-malaria measures, including a special malaria survey in the Ranchi Municipality, continued to be pushed vigorously.

The engineering staff of the Public Health Department was chiefly engaged on water-supply projects. The increasing reliance on tube-wells for this purpose is a striking feature, and nearly all the wells sunk on behalf of Government have proved successful.

The problem of leprosy in Bihar and Orissa is receiving special attention. A leprosy clinic, opened as an experimental measure in 1926, is working at Bakhari, in Champaran District, and another has since been opened in Darbhanga. A third clinic at the cost of government has been opened experimentally at Hatigarh, in the district of Balasore, and the construction of buildings for a clinic at Cuttack has been completed. The opening of a Pasteur Institute at Patna for the treatment of anti-rabic cases has now been sanctioned.

In the Central Provinces the year 1927 showed a slight decrease in the birth and death-rates. Small-pox, plague, and influenza

in a mild form have been present in many areas. The Chhatisgarh Division and Jubbulpore, Akola, Amraoti and Wardha, Bilaspur, Raipur, and Drug districts were badly infected with cholera. The special Welfare Committee of the Red Cross Society constituted in 1926 to organize and expand maternity and infant welfare work made considerable progress, and the Provincial Government made a grant of Rs. 30,000 to be devoted to this object. Welfare centres in eighteen towns are now in being, and the usual " Baby Week " was held in thirty-four towns. In fact, health measures for women and children have gained a firm hold. In accordance with the necessity for measures to counteract the scourge of plague which is endemic in Nagpur and Jubbulpore, " anti-rat " campaigns are pursued, but these are not sufficiently systematic. Unless the measures taken to destroy rats are carried out continuously for a long period both during the time of plague and more especially during the period of immunity there seems little hope of stopping effectually the recurrence of epidemics, and the large towns will remain an endemic focus of plague.

In Burma, during 1927, the provincial birth and death rates, *viz.*, 25·08 and 19·55 per mille, were lower than in the previous year. The excess of births over deaths was 59,859—an increase of 5 per mille in the population. There was a decline in the provincial death rates for cholera and small-pox, while the mortality from plague rose. A total of 62,467 cholera inoculations were performed. Plague deaths numbered 3,508 or ·32 per 1,000 of population. Anti-plague measures (*e.g.*, rat destruction and inoculation) were vigorously pushed. Deaths from fever, (75,321) were more, and those from dysentery and diarrhœa (8,279) were lower than in the previous year. Four hundred and eighty-five deaths from beri-beri were recorded in towns. A Venereal Diseases Bill to provide proper facilities for treatment and to prohibit the sale of quack cures was under the consideration of the local Government. The infantile mortality rate, which was 201·40 in 1926 fell to 198·06 per 1,000 births. A total of 315 maternal deaths were registered in towns. The societies for the promotion of infant welfare functioned in 14 towns, and two new centres were opened. Baby Weeks were held at sixteen places. The increase in attendance in hospitals and dispensaries continued during the year under report, and about 13,000 patients were treated by medical practitioners, subsidised by government at a cost of about Rs. 1-4 per head.

The birth rate in Assam during 1927 showed a slight decrease, and the death rate a slight increase as compared with the year 1926. The excess of the birth rate over the death rate was 6·78. The collection and registration of vital statistics is in many cases defective in this province. The year was marked by a considerable increase in the mortality from cholera, 15,000 deaths being recorded from this cause. Cachar and Sylhet, in Surma Valley, and Nowgong, Sibsagar and Darrang, in Assam Valley, were seriously affected. The death rate from small-pox also rose. The increase in small-pox mortality in recent years is attributed to insufficient protection by vaccination, due to inefficient supervision of the vaccinators. The local government took adequate steps to remedy this. The campaign against kala-azar continued with unabated vigour and with conspicuous success. Both the number of cases treated and of deaths from kala-azar decreased by slightly over 30 per cent., and about the middle of the year the universal or mass free treatment by urea stibamine was introduced throughout the province. Anti-malarial measures were continued. The price of a course of treatment consisting of 20 tablets of quinine sulphate is now 4½ annas.

In the Punjab, so far as the death rate (27·5 per mille) was concerned, the year 1927 was one of the healthiest years on record, though cholera was epidemic and was responsible for 11,286 deaths. The decrease in mortality, as compared with the previous year, was 9·06 per mille and was attributed to the relatively low death rate from plague and fevers. The birth rate, which was 42·3 per mille, was in excess of the previous year by ·7 per mille. The infant mortality rate, being 167·50 per 1,000 births, was unusually low, mainly due to the almost complete absence of epidemic malaria during the year. The Punjab Health School was provincialised. The Epidemiological Bureau was mainly concerned with work in connection with the malaria forecast and surveys, the study of epidemic malaria, spleen census, examination of water supplies and other experimental, statistical and routine work. Twenty-eight qualified health visitors were employed during the year by local health committees.

In the North-West Frontier Province, in 1927, the birth rate (29·3 per mille) showed a slight decrease, while the death rate (22·0 per mille) increased. The infant mortality rate rose from 146·57 per 1,000 births in 1926 to 150·77 in 1927. The chief causes of mortality in the province as a whole were fevers (38,673 deaths)

and respiratory diseases (1,961 deaths). The number of hospitals and dispensaries during the year increased by one. The Lady Bolton Dais Training Centre at Dera Ismail Khan did excellent work.

* * *

The greatest weakness of the present educational situation in India is the widespread illiteracy of the masses. It is here that the most urgent need for action lies, but the problem is rendered difficult by factors peculiar to the country. India is a land of vast spaces, and her communications are still far in defect of her requirements. Immense numbers of her people are poor and ignorant, bound by iron tradition and age-old custom. Above all, the women teachers, who are the prime instrument of elementary education in all other civilised countries, are scarcely available for this work in India. Educated men drift inevitably from the countryside to the towns, and the village school master is therefore isolated, too feeble a ray to dispel the surrounding gloom of ignorance unaided. But there is a glimmer of hope in the policy of encouraging medical men to settle down and open dispensaries in rural areas, for their presence ought to stimulate intellectual life in such places. Yet, in spite of these difficulties, steady progress is being made. It is gratifying to notice, also, that much attention is being given to the enlightenment of the masses in general, and to that of the backward classes and of women in particular. In this report will be found graphs, specially compiled for the purpose of showing the progress of women's education in all branches over a long period. These graphs, together with those which show expenditure of all kinds on education in India, have been specially prepared in the hope that they will be useful to students of Indian social problems, for in the education of India's women will be found one of the most potent of all the forces now at work for her progress and uplift. Owing to the social customs and religious prejudices of large and important sections of the population, the difficulties in the way of women's education are especially great. The demand for such education has hitherto been very small, and this is the first and greatest obstacle. Another obstacle is the serious dearth of women teachers, who must mainly undertake the instruction of illiterate sisters. A handful of enlightened individuals, it is true, defying caste, precept and ancient usage, have insisted on the education of their womenfolk, but the sum total of these efforts have hitherto been almost negligible. Recently, how-

DIAGRAM.

Totals of Literates and Illiterates : British India.

DIAGRAM SHOWING THE MALE AND FEMALE POPULATION OF INDIA AT EACH CENSUS AND THE ESTIMATED POPULATION ON 31-3-26 AND 31-3-27 AND THE MALE AND FEMALE LITERATES AND ILLITERATES ON THOSE DATES.

MALE POPULATION

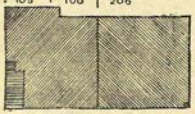
FEMALE POPULATION

MALE LITERATES

FEMALE LITERATES

POPULATION (IN MILLIONS) 1872

MALES	FEMALES	TOTAL
105	100	206



LITERATES (IN MILLIONS)

MALE	FEMALE	TOTAL
9	·2	9·2

POPULATION (IN MILLIONS) 1881

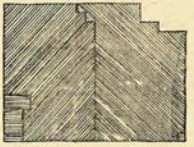
MALES	FEMALES	TOTAL
130	124	254

LITERATES (IN MILLIONS)

MALE	FEMALE	TOTAL
10·5	·4	10·9

POPULATION (IN MILLIONS) 1891

MALES	FEMALES	TOTAL
147	140	287

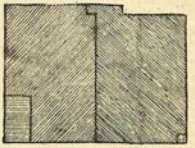


LITERATES (IN MILLIONS)

MALE	FEMALE	TOTAL
11·5	·5	12

POPULATION (IN MILLIONS) 1901

MALES	FEMALES	TOTAL
149	144	293

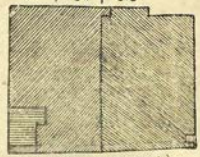


LITERATES (IN MILLIONS)

MALE	FEMALE	TOTAL
14·7	1	15·7

POPULATION (IN MILLIONS) 1911

MALES	FEMALES	TOTAL
161	154	315



LITERATES (IN MILLIONS)

MALE	FEMALE	TOTAL
16·5	1·0	18·5

POPULATION (IN MILLIONS) 1921

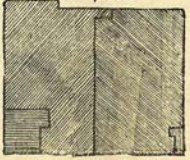
MALES	FEMALES	TOTAL
164	155	319

LITERATES (IN MILLIONS)

MALE	FEMALE	TOTAL
19·8	2·8	22·6

ESTIMATED POPULATION (IN MILLIONS) ON 31-3-26

MALES	FEMALES	TOTAL
168	158	326

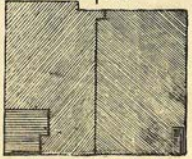


LITERATES (IN MILLIONS)

MALE	FEMALE	TOTAL
22·0	3·3	25·3

ESTIMATED POPULATION (IN MILLIONS) ON 31-3-27

MALES	FEMALES	TOTAL
169	159	328



LITERATES (IN MILLIONS.)

MALE	FEMALE	TOTAL
22·7	3·5	26·2

NOTE.—IN ARRIVING AT THE ESTIMATED POPULATION ON 31.3.26 AND 31.3.27, AS ALSO THE ESTIMATED NUMBER OF MALE AND FEMALE LITERATES ON THOSE DATES THE FOLLOWING FACTORS HAVE BEEN CONSIDERED :-

1. THE NUMBER OF BIRTHS IN EACH YEAR FROM 1927
2. THE NUMBER OF DEATHS IN EACH YEAR FROM 1891.
3. THE NUMBER OF CHILDREN (MALE AND FEMALE) ABOVE FIVE YEARS OF AGE ATTENDING SCHOOL
4. THE ANNUAL AVERAGE RATES OF INCREASE IN POPULATION AND THE ANNUAL AVERAGE RATES OF INCREASE IN THE NUMBER OF MALE AND FEMALE LITERATES, FROM 1872 TO 1921

ever, many hopeful signs have appeared. The growing enlightenment of the people is tending to break down the old prejudices, women themselves seem less satisfied with the customary illiteracy of their mothers and grandmothers, female education and co-education in the primary classes have already attained somewhat impressive dimensions; schools and colleges for women are on the increase; women are being encouraged to take up physical training, games and vocational education; and, perhaps best of all, propaganda in this excellent cause is widespread. There is a steady increase in the number of girls schools and girl pupils. In 1927-28, the number of recognised institutions for girls rose by 2,002 to 30,003, whilst their strength increased by 94,999 to 1,213,546. There were 46,855 boys reading in girl's schools while, on the other hand, 733,199 girls were under instruction in boys' schools, so that the total number of girls reading in recognised institutions was nearly two millions (1,899,890). The vast majority of these girls, however, are reading in primary schools. In all India there were only one hundred and eighty-two women studying in medical colleges and one hundred and thirty-four in training colleges for teachers. There are eight Primary Education Acts in force in the Provinces, but of these only four—the Bombay, Madras, the United Provinces and Assam Acts—were applicable to girls at the end of the year 1927-28.

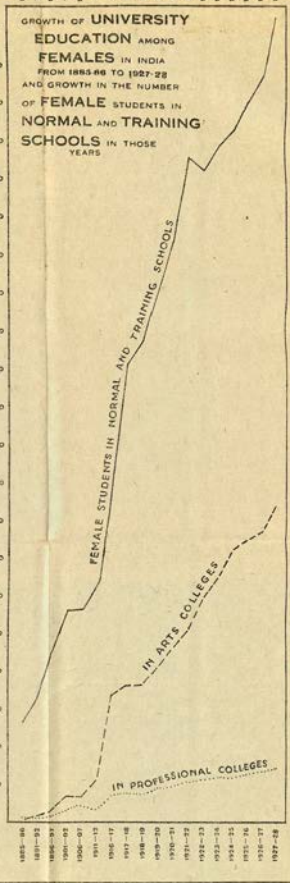
Compulsory education is another matter which deserves special mention. It had begun to come slowly into favour before the Reforms, and since their inception the need for it has been more generally recognised. The popular legislatures early declared themselves in favour of the principle, but the Municipalities and District Boards at first showed some hesitation in adopting it. They seemed loth to identify themselves either with any coercive measures or with the imposition of the additional taxation necessary to meet the cost of compulsion. But, happily, this attitude is gradually disappearing, and to-day we find compulsory primary education spreading over an ever-increasing area. The latest figures available show that compulsion has been introduced in 114 Municipalities and 1,527 rural areas.

Progress is still hampered by the chronic poverty of the masses and their hereditary prejudice to educational innovations, but Ministers are displaying more and more courage, enthusiasm and initiative in this part of their work. They are closely studying the problems involved and taking such steps as seem best

fitted to solve them. In particular they are gradually eliminating the old, inefficient, one-teacher village school, and are endeavouring to provide the children of the agricultural classes with instruction more suitable to their circumstances. The grant-in-aid system, too, is receiving attention. Side by side with these improvements is going on a process of decentralisation of control. Municipalities and Local Boards are being entrusted with more and more powers and functions, and many of these bodies are exercising their increased responsibilities with care and wisdom. A particularly satisfactory feature of recent developments in education is the increasing attention now being devoted to the education of children belonging to the depressed classes. Owing to differences in the manner of classification in the provinces it is difficult to give accurate figures of the total number of pupils belonging to the depressed classes who are now under instruction. The majority of the provincial reports, however, now classify " untouchables " or outcast Hindus separately from Aborigines, Hill tribes, and other backward classes. Leaving aside Burma, where there are no untouchables and Assam, where it is impossible to distinguish between the large numbers of Aborigines and Hill tribes and the untouchables, properly so called, the total number of depressed class pupils reading in all kinds of institutions in the remaining seven provinces was 806,658. This figure bears the percentage of 2·8 to the total depressed class population of these provinces, as against the all-India figure for all communities of 4·5. The number of depressed class pupils have shown a satisfactory increase, but much leeway has still to be made up. In all provinces, except Bengal, the number of scholars reading at the secondary and University stages is still depressingly small. One satisfactory feature of the reports from the provinces is in the increase in the number of depressed class pupils reading in ordinary schools and in the number of caste pupils reading in the special schools mainly intended for the depressed classes. In the Punjab as many as 15,899 pupils out of a total of 19,049, were reading in ordinary schools, and in Madras out of a total of 262,716 pupils reading in schools especially intended for the depressed classes, nearly 70,000 were caste pupils.

The Government of Madras has continued to insist on all publicly managed schools being located in quarters accessible to the depressed classes. During the year 210 schools situated in inaccessible quarters were removed to accessible centres. In consequence of the policy adopted, 83 per cent. of the schools under the man-

GROWTH OF FEMALE EDUCATION IN INDIA
FROM 1885-86 TO 1927-28
IN THOUSANDS
2,000
1,900
1,800
1,700
1,600
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
1885-86
1891-92
1896-97
1901-02
1906-07
1911-12
1916-17
1917-18
1918-19
1919-20
1920-21
1921-22
1922-23
1923-24
1924-25
1925-26
1926-27
1927-28
TOTAL NUMBER OF FEMALES RECEIVING EDUCATION
FEMALES IN PRIMARY SCHOOLS
FEMALES IN SECONDARY SCHOOLS



NOTE.—The number of female students in professional colleges was made up principally of students attending medical and teaching colleges. The numbers of those attending other colleges were as follows in the last six years:—

	Law Colleges	Commercial Colleges	Agricultural Colleges
1922-23	...	3	...
1923-24	...	4	...
1924-25	6	1	...
1925-26	8	...	...
1926-27	9	...	...
1927-28	6	1	1

agement of Municipalities and Taluk Boards are now held in quarters accessible to the depressed classes.

In Bombay there was an increase of nearly 6,000 depressed class pupils under instruction, and the Director of Public Instruction, Bombay, reports that " the prejudice against the depressed class children is lessening. In the Deccan there is little doubt that these communities are sharing in the general awakening of the backward classes. There are fewer signs of any such awakening in Gujerat." The Director of Public Instruction in the United Provinces also reports that caste prejudice is breaking down, and states that " there is now no strong opposition to these boys reading in the ordinary Board schools, and the number of such boys is increasing. Still stronger evidence of the breaking down of caste prejudice is to be found in one Inspector's report that high caste boys were found to be reading in a number of schools for the depressed classes."

The higher branches of education share with the primary stages the progress which has taken place during recent years. There is a feeling abroad that however satisfactory may be the position of secondary and university education from the quantitative point of view, from the qualitative there is much to be desired. This is especially true of secondary education, which, generally speaking, is poor as compared with Western standards, and is in parts ill regulated. The methods of instruction are faulty, the staff takes little interest in its work and the ambition of the pupils is generally mercenary. Too slight attention has been given in the past to the moral, social, and physical sides of education—the intellectual side has been everything. It is encouraging to observe, however, that serious attention is now being paid to physical training in the schools, and some provinces now have whole time Directors of physical education. Little improvement, though, is to be looked for as long as the demand for secondary education remains what it is, for efforts are likely to lead to nothing more than the mere multiplication of institutions of the present inefficient and ineffectual type. It seems to be recognised that the system of secondary education stands in need of some overhauling so as to bring it more into line with present-day requirements and aspirations. It is recognised, too, that since even at best only a small portion of India's vast population can hope to pass beyond the stage of secondary education, this education should be sound and complete in itself. Hence there is a growing desire and an increasing endeavour

to reconstruct it so as to separate secondary and university education, confining each to its proper sphere and making the former self-contained. Boards of Secondary and Intermediate Education or Boards of Secondary Education have been constituted in certain provinces, and are doing valuable work. Intermediate colleges have been established in some places, and vocational training is becoming steadily more popular. This is satisfactory since unemployment among the middle classes is due largely to the purely literary type of the education hitherto imparted. There is still great scope for the expansion of professional and technical education. In 1927-28 there were, in all India, 18 Engineering Colleges and schools with an enrolment of 4,283. These may be classified as follows:

Engineering Colleges—7 with 2,064 scholars.

Engineering schools—11 with 2,219 scholars.

It should be noted that Engineering Schools includes Surveying Schools.

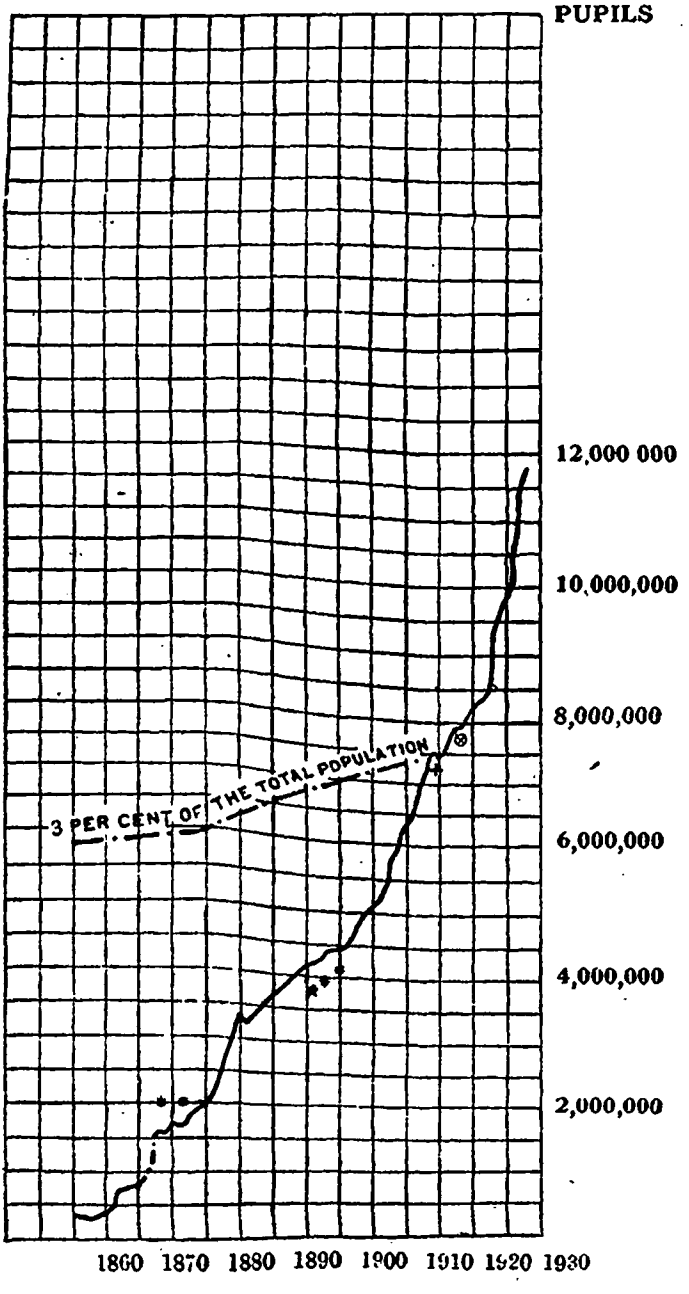
Unlike primary and secondary education, university education is not under the entire control of Provincial Governments. A few universities are directly under the Government of India, which continues to exercise certain powers in respect of these universities. Formerly, the great majority of Indian Universities were examining bodies, testing the attainments of the alumni of groups of individual and often scattered colleges, sometimes inadequately staffed and equipped, whose ambition usually outran their capacity. The old universities are, one by one, being remodelled so as to be both teaching and examining bodies, and new ones are being set up. Further, a desire to relegate preliminary work to the intermediate colleges and to confine the universities to higher instruction is now evident, particularly in the United Provinces. Colleges have been reorganised, new methods of administration adopted, and new courses of instruction introduced. Unfortunately, the establishment of new colleges seems to be leading to an undesirable competition for students, and, consequently, a lowering of the standard of education. The inauguration of the Central Inter-University Board might provide a safeguard against this danger, and it is possible that the growing tendency to specialise in the teaching of particular subjects will in the end provide a way out.

The attack on illiteracy has not been confined to the formal education institutions. Recognising that education, in the true sense, is a life-long process and that adult education is a necessity

DIAGRAM.

Total number of pupils under instruction in India.

Famine..... *
Commencement of Plague..... *
Influenza..... ⊗
Indian States omitted..... +



if the country is to have an electorate able to understand and properly use the suffrage that has been conferred upon it, Ministers have been turning their attention to this important problem. The urban population presents no difficulty, for the towns offer much scope for the university extension movement. The case of the rural population, however, is different, and to meet their wants various measures have been adopted. One of these is the organisation of lectures on matters connected with health and welfare. another is the night school movement; another, the device already mentioned of encouraging medical men to settle down in the villages; yet another is the establishment of village libraries and elementary literary societies. All these are yielding small but favourable results. It is difficult to give accurate details for the number and strength of schools for adults in the provinces since in many provinces no distinction is made in classification between schools which really provide for the education of illiterate adults and schools, especially night and part-time schools, which are attended most largely by ordinary primary school children who are unable to attend day schools. The Punjab is still leading the way in the provision of schools for illiterate adults, and the activities of the Rural Community Board and the District Community Councils in the matter of providing village libraries, lantern slides, lecture notes and pamphlets have greatly stimulated the movement for mass education. By the end of the year under review vernacular libraries, open to adults, had been started in nearly two thousand vernacular middle schools in the Punjab.

The following tables will show at a glance the number of institutions and scholars in India, and the total expenditure on education in respect of recognised institutions during the year 1927-28.

Institutions and Scholars, 1927-28.

Type of Institution.	Institutions.		Scholars.	
	For Males.	For Females.	Males.	Females.
Recognised Institution . .	189,792	30,003	9,260,266	1,899,890
Un-recognised Institution .	31,536	3,378	518,511	96,555

Total expenditure on Education in India, 1927-28.

(Recognised Institutions.)

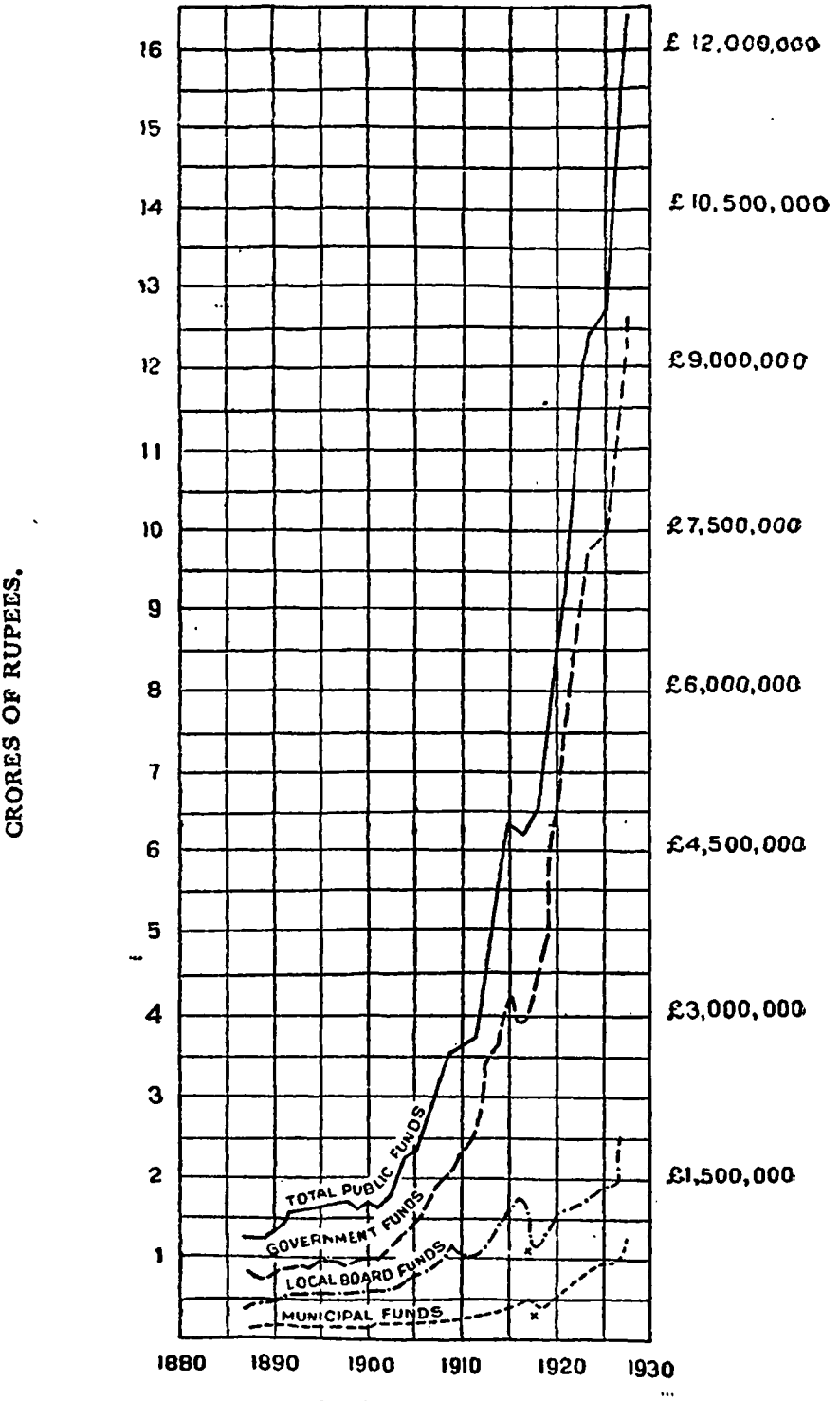
	Rs.
1. From Government Funds . . .	12,66,92,478
2. From Board and Municipal Funds . .	3,78,88,437
3. From Fees	5,44,71,633
4. From other sources	3,92,26,271
TOTAL .	25,82,78,819

We may now turn to the progress of education in the Provinces during 1927-28, the latest year for which provincial reports are available. In Madras considerable progress was made in the provision of elementary education. Sanction was accorded for the opening of 687 Board elementary schools for Boys under the Taluk Boards, and 612 schools for Boys under the management of village panchayats with the aid of provincial funds. Funds were also placed at the disposal of the District educational councils for the opening of nearly 100 schools for boys under private management. The Madras Corporation introduced compulsory education in all divisions of the city for all children of school-going age, except Muhammadan girls. As an experimental measure sanction was also accorded for the opening of adult education classes, by non-official and honorary workers in 15 selected centres. Sanction was also accorded during the year for the opening of 409 Board elementary schools for boys, involving an annual recurring expenditure of over one lakh of rupees. The increasing demand for women teachers necessitated the opening of 4 additional training schools for mistresses. The number of public elementary schools for boys increased from 46,378 to 48,407 and their strength from 1,985,617 to 2,094,138. The total number of teachers in public schools also increased from 83,280 to 87,978, while the number of trained men among them increased from 39,913 to 43,002. Excellent progress was also made in female education during the year under review, the number of schools for Indian girls rising from 3,567 to 4,273 and their strength from 246,864 to 280,200. During 1927-28 there were 585,339 girls attending all grades of institutions as against 534,640 during the previous year. The total number of training schools for women under various managements was 41, and the number under training 1,973.

Education in the Bombay Presidency has progressed at a rate which has eclipsed even the most sanguine expectations, and the

DIAGRAM.

Public Expenditure on Education.



× Fall due to reclassification of expenditure according to which Government contributions made to local bodies for education are included in expenditure from provincial funds.

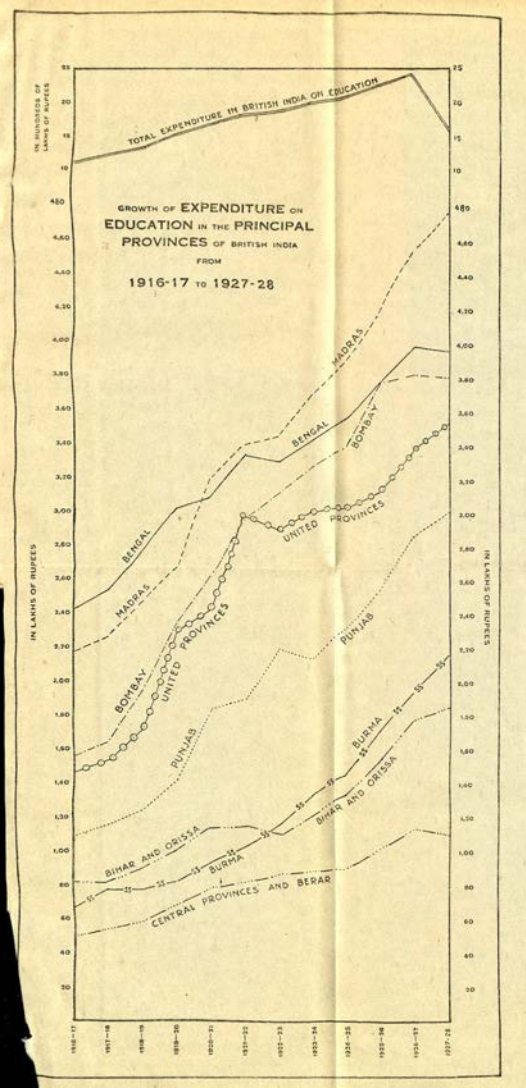
main problem to-day is the provision of sufficient funds to cope with the all-round expansion of both primary and secondary education. The total number of recognised and unrecognised educational institutions in the Presidency increased by 502 to 16,713 and the number of pupils in them by 43,439 to 1,192,153. Out of a total of 26,812 towns and villages 10,327 possess schools, and the percentage of male scholars under instruction to the total male population was 9·43 against 9·12 in the preceding year, while that of female scholars under instruction to the female population was 2·58 against 2·43. The total expenditure on education in the Presidency rose by over 8 lakhs to about 390 lakhs, government funds contributing 51·4 per cent, Board funds 17·6 per cent, fees 17·7 per cent. and other sources 13·3 per cent. Primary schools absorbed over Rs. 197½ lakhs, exclusive of expenditure on inspection, instruction and repairs. Primary schools for boys increased by 459 to 12,759 and the number of pupils in them by 27,911 to 879,394. The number of girls under instruction in primary schools was 211,279, an increase of 12,675. The number of District Local Boards and Municipal Schools for boys and girls increased by 347 to 11,521, and the number of pupils in them by 27,878 to 871,013. There are 12 training institutions for men with 840 pupils and 18 for women with 637 pupils. The total number of Muhammadans under instruction increased by 9,676 to 197,595, of whom 42,527 were girls. There are nearly 480,000 Hindus receiving instruction in intermediate institutions and 129,756 members of the backward classes, including 63,620 of the depressed classes.

The general condition of secondary education in Bengal continued unsatisfactory, although it has been possible to improve the difficulties of employment of teachers to some extent by increasing the rates of fees, taking additional grants from Government, and by the institution of a Provident Fund. But the majority of teachers employed in schools under private management are still badly paid, and in many cases inefficiently qualified. There was much room for improvement in the method of recognition in High Schools, the course taught by them, and in the nature of examinations to which High School pupils are presented. A proposal for the institution of a Board of Secondary Education is now under the consideration of Government, and until that comes into existence there can be little hope for reform. Primary education has made good progress during the year. The number of schools for Indian boys increased from 38,187 to 38,990. Of this number

681,418 were Hindus and 800,503 were Muhammadans. A sum of Rs. 62,36,249 was spent on maintaining primary schools during the year, compared with Rs. 55,90,162 in the previous year. The number of secondary schools for Indian boys increased from 2,805 to 2,884, and High and Middle English schools increased by 13 to 66 respectively. The number of recognised and unrecognised schools for Indian girls increased from 15,040 to 15,964, and the number of pupils attending them from 363,961 to 394,025.

The total number of Muhammadan pupils in all types of educational institutions in Bengal was 1,235,706, and the number of Muhammadan girls enrolled in recognised institutions was 242,483 against 221,206 in the previous year. Female education in the Muslim community in Bengal is only increasing in the primary stage. In the higher stages of education the number of girls is practically the same as it was several years ago.

In the United Provinces education continued to make great strides. During 1927-28 the number of educational institutions increased from 24,820 to 25,848, of which 23,270 were recognised institutions. There was an increase of 6 per cent. in the total number of scholars enrolled during the year, and the percentage to the total population was 3·16 against 2·97 last year. The expenditure on education increased from Rs. 337·79 to Rs. 354·06 lakhs, of which the Government's share was 57·95 per cent. A beginning has been made in the extension of compulsory primary education in rural areas under the new Act. The scheme of 19 District Boards for the institution of compulsory primary education has been sanctioned by Government, whilst in the case of 14 other boards, schemes have been approved and will be put into operation as soon as funds are available. The most formidable difficulty in the way of the expansion of primary education in rural areas is the comparative inelasticity of District Board funds. Formerly 90 per cent. of the cost of education was met by Government, but under the new Act, District Boards must meet an ever-increasing proportion of the total expenditure. Government have also sanctioned the schemes of 6 more Municipal Boards for compulsory primary education, and the number of municipalities in which it is now enforced is 36. Secondary education has also progressed considerably since the publication of our last report. The number of secondary institutions rose from 889 to 909, and enrolments from 1,32,366 to 1,46,554 and the expenditure increased from 70·31


GROWTH OF EXPENDITURE ON EDUCATION IN THE PRINCIPAL PROVINCES OF BRITISH INDIA FROM 1916-17 TO 1927-28
TOTAL EXPENDITURE IN BRITISH INDIA ON EDUCATION
IN HUNDREDS OF LAKHS OF RUPEES
IN LAKHS OF RUPEES
BENGAL
MADRAS
BOMBAY
UNITED PROVINCES
PUNJAB
BURMA
BIHAR AND ORISSA
CENTRAL PROVINCES AND BERAR
1916-17
1917-18
1918-19
1919-20
1920-21
1921-22
1922-23
1923-24
1924-25
1925-26
1926-27
1927-28

lakhs to Rs. 73·87 lakhs, of which 53·7 per cent. was met by provincial funds. There was a slight increase in the number of High and Middle schools from 236 to 243, and in the enrolments from 67,678 to 73,436. The middle schools as a class are reported to be inefficient, while the High Schools vary in efficiency. There has been a certain amount of deterioration in the standard of English as a result of the introduction of the vernacular as a medium of instruction. It is encouraging to note, however, that a better and more active type of discipline was noticeable during the year, due to the spread of the Boy Scout movement and physical training, and the introduction into the curriculum of first aid and manual training. The number of educational institutions for girls in the United Provinces rose from 1,807 to 1,872 and enrolments from 80,324 to 85,112. Sixteen per cent. of the total enrolments came from Muslims, 5 per cent. from Indian Christians, 75 per cent. from High Caste Hindus, and 2 per cent. from the depressed classes. There were 26 post-intermediate students at the Isobel Thoburn College, Lucknow, and 18 at the Crossthwaite Girls' College at Allahabad. There are now 13 High Schools for Girls in the province, as against 11 last year, 4 being recognised. Lack of trained women teachers is still a great hindrance to the spread of female education in this province. Many local Boards have no sense of responsibility for girls' schools and some even do not appear to pay standard rates for trained teachers. In one circle alone 11 schools were closed for lack of funds.

In the Punjab the percentage of pupils under instruction to the total population during the year 1927-28 was 6·04 against 5·72 the previous year. The figures for boys only gives a percentage of 9·77 against 9·32. More than a third of the total increase for the year was contributed by Ambala Division with 21,802 additional pupils. Multan was next with 5,416 pupils and Rawalpindi third with 1,991. The total enrolment in all schools for the year was 1,248,131, an increase of 65,395. Primary schools showed an increase of 43,689 scholars. In the cities of Lahore and Amritsar, where compulsion has been enforced for some time, 93 and 94 per cent. respectively of the boys of school age are reported to be at school. There is a general keenness among the people for education, and the question of future advance is mainly a question of funds. Adult education is growing in popularity, and the establishment of village libraries is greatly assisting the spread of literacy.

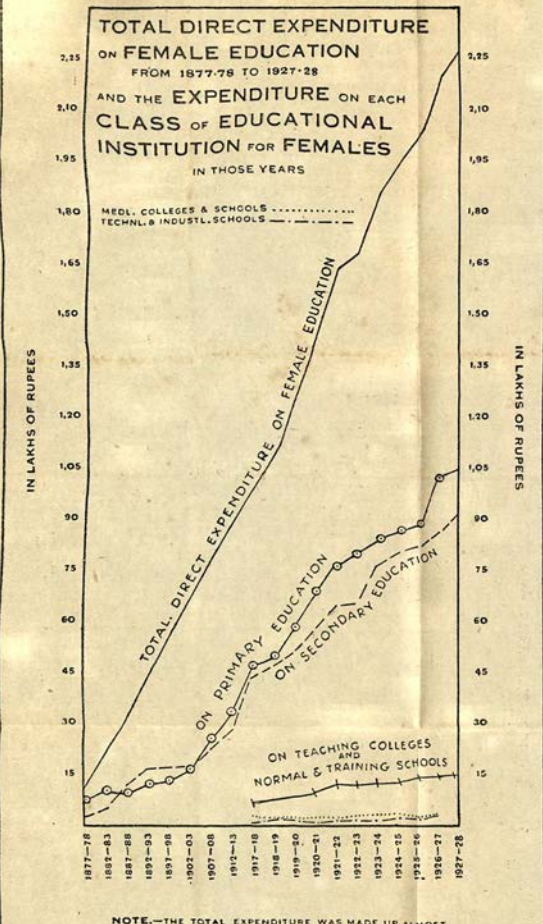
The education of girls is also advancing rapidly in the Punjab. The total roll has risen by 13·6 per cent, and another important feature of the statistics is the increase of 10,333 girls in boys schools for Indians compared with 3,845 in 1924-25. That the number of such girls should have doubled in the course of three years is of good augury for the future of co-education. The attitude of the Legislative Council towards education generally is very encouraging.

The number of secondary schools in the Punjab increased from 2,626 to 3,048, an increase of 422 or 16 per cent. Of this number 404 are vernacular secondary institutions, 17 are anglo-vernacular middle, and one a high school. The increase in the number of scholars is 60,414, giving a total of 551,193.

Marked educational progress was made in Burma during the year 1927-28. Four important public committees produced their reports, and two departmental committees submitted recommendations during the year. The number of public schools (7,123) increased by 238, of which 191 were new schools opened under government's special five-year scheme for new schools in backward districts. The existing schools were better attended, the total number of pupils (478,441) increasing by 35,139. Over 70 per cent. of these were still in the Lower Primary Stage at the close of the year. The total expenditure on education in 1927-28 was Rs. 2,18,44,339 or Rs. 24,60,535 more than in the previous year. The average expenditure per head of the population was Rs. 1-10-5 of which Rs. 1-2-5 was met from public funds. There were 242,524 boys receiving primary education in Burma at the close of the year, an increase of 14,612. The corresponding number of girls was 169,378, an increase of 13,428.

The number of Muhammadans under instruction in public schools was 23,234, and the corresponding number in private schools was 6,278. The number of girls attending schools increased by 14,542, and the percentage in the lower primary standards was 80, compared with 70 for boys.

Secondary education showed no change during the year. The Niven Committee presented its report on professional and technical education during the year, and recommended *inter alia* that vocational education should not be attempted in ordinary schools, and that a Provincial Board of Commercial and Industrial Education should be established.



NOTE.—THE TOTAL EXPENDITURE WAS MADE UP ALMOST ENTIRELY OF EXPENDITURE ON SECONDARY AND PRIMARY SCHOOLS IN THE YEARS 1877-78 TO 1912-13.

In recent years the major portion of the funds allotted for educational purposes in the province of Bihar and Orissa has been devoted to primary schools, and the result has been a greater increase in the number of schools and the pupils attending them. The total number of primary schools of all classes with Indian and European boys and girls attending them rose from 30,247 to 39,711, and the number of pupils attending them from 941,675 to 964,762. No additional grants for primary education were made by the Government, but the total increase in the direct expenditure from public funds amounted to Rs. 3,74,767. There was a fall in the number of unaided schools in 12 of the 21 districts, but this is not altogether to be deprecated since many of the schools spring up in places where they are not really required. There was a great deal of stagnation in the educational life of the province, and the main reasons for the poor progress made by many pupils are poor teaching, irregular attendance, the admission of very young children, and a lack of interest on the part of parents. A large number of primary schools exist with a single teacher, who is frequently untrained. The latest census of such schools indicates that there are 21,615 primary schools staffed with only one teacher. This condition of things naturally produces stagnation since a large number of pupils never get beyond the last class and are withdrawn from schools before they have learned even to read or write. There was an increase in the number of secondary schools in the province during the year from 730 to 778, while the number of pupils increased from 101,793 to 114,764.

To meet the criticism that education in the province was too literary, action was taken in several districts by Government during the year. A school in agriculture was opened in the Bikram Middle Vernacular School in Patna District, and schools in carpentering and tailoring were started in a few middle schools in other districts. Unfortunately local bodies are taking very little interest in vocational education, and even the much talked of *charkha* is losing its popularity in the majority of districts.

Female education in the province of Bihar and Orissa is still in its infancy, but considering the serious social obstacles which blocks its progress, the achievements of the year under review may be considered satisfactory. There were 2,978 educational institutions for girls in the province at the close of the year, with 121,164 scholars. The formation of women's associations at Patna, Cuttack and Ranchi is stimulating the demand for the edu-

cation of girls, but progress is mainly hampered for want of qualified women teachers. With a view to remedying this need the Government sanctioned a special scale of pay for trained women matriculates in the vernacular teachers' services, but even this failed to attract the teachers required.

In the Central Provinces steady progress was made during the year under review. The total number of pupils receiving instruction increased by 15,585, representing all kinds of educational institutions. The enrolment in high schools rose to 5,172, the highest figure yet reached in this province, while that in primary schools increased by 7,335. The Central Provinces Primary Education Act amended during the year to enable local bodies to introduce compulsion in any area by stages. There was a decrease in the total expenditure on education from Rs. 1,13,63,933 to Rs. 1,11,38,879, mainly due to the payment in the previous year of special grants to local bodies for vernacular school buildings. A change in policy was made in respect of female education during the year, the responsibility for opening new vernacular schools for girls being transferred from Government to local bodies.

The number of depressed class pupils increased from 40,677 to 40,848 during the year.

In Assam the year 1927-28 was marked by the most substantial increase in the number of schools and pupils that has been recorded since the formation of Assam as a separate province. The number of institutions and scholars increased from 5,768 and 288,670 to 6,307 and 317,081, respectively. Expenditure in all institutions for boys and girls increased by 7·4 per cent, the cost to the provincial revenues rising by 9 per cent. During the year under review, the Assam Primary Education Act was brought into force. The number of primary schools for boys increased from 4,377 to 4,719, and their enrolment from 199,903 to 217,934. A corresponding increase was recorded in the number of secondary schools for boys, which increased from 345 to 357, and their enrolment from 46,312 to 50,320. The number of girls reading in schools increased from 37,802 to 43,794. The number of Tea Garden Schools rose from 65 with 1,798 pupils to 81 schools with 2,281 pupils.

The total number of educational institutions of all kinds in the North-West Frontier Province rose from 1,033 to 1,118, while the number of public institutions for boys increased from 661 to 752.

The number of pupils in all institutions rose from 69,718 to 76,756, namely, by 7,038. In private unrecognised institutions there was a decline to 467 pupils and in public schools of all kinds the number of pupils rose by 7,505. The percentage of male scholars to the total male population shows a slight increase from 5·0 to 5·6, and of girl scholars to the total female population from ·7 to ·8. The percentage of boy pupils to the male population of school-going age increased from 33·7 to 37·2, the corresponding figures for girls being 4·8 to 5·4. The number of primary schools and scholars in them at the end of 1927-28 was 601 and 32,575 respectively. The number of children attending the primary schools of primary and secondary schools rose from 51,967 to 58,337, an increase of 12·6 per cent. The direct expenditure on primary education in the North-West Frontier Province increased from Rs. 3,23,310 to Rs. 3,30,154. The cost of maintaining a primary school fell from Rs. 591 to Rs. 549, and the average annual cost of educating a pupil in a primary school fell from Rs. 11-13-2 to Rs. 10-11-11. The returns for the year under review with respect to female education showed a rise in the number of institutions and a substantial increase in the enrolment. The number of unrecognised institutions for girls in existence at the close of the year was 91, and the number of pupils 7,434, an increase of 806. The financial assistance provided for the education of girls in the North-West Frontier Province has hitherto been very meagre, but the results obtained display an increased keenness on the part of all concerned. Secondary education has also made good progress in the North-West Frontier Province. The total number of pupils attending High and Anglo-Vernacular middle schools rose from 13,307 to 13,866, while the total direct expenditure on high schools increased from Rs. 4,83,166 to Rs. 5,14,632, and on Anglo-Vernacular middle schools from Rs. 96,714 to Rs. 1,08,752.

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The Co-operative Society movement is one of the most promising and important of the efforts now being made to improve the conditions of life in India. Its activities are not confined merely to the agricultural population, although, of course, it is among them that it finds its greatest scope and widest field of work. It is now about 23 years since the movement was started in India, and its record has been one of uninterrupted progress; the total number of Co-operative Societies having risen to 76,371. More-

over, the growth has, on the whole, been a sound and healthy one, and if the most important of all the statistics which are prepared in connection with Co-operative Societies are studied, it will be seen that the co-operative movement in this country is in a thoroughly sound condition.

Through these societies a good deal of quiet constructive work has been carried on. Their membership and capital continue to grow steadily, and one of their primary objects is the encouragement of thrift by collecting small shares, receiving deposits and attempting to induce members to make compulsory contributions for special purposes. Agricultural non-credit societies are extending their operations every year. They undertake the joint sale of agricultural produce, the production and sale of implements and manures, the furtherance of irrigation projects, and the consolidation of holdings. They open dispensaries and schools, they assist the Agricultural Departments in spreading knowledge of improved methods of cultivation, and they maintain communications and build new roads.

In the Madras Presidency the working of the Co-operative Movement underwent a large expansion during the year, 1927-28, no less than 1,112 Agricultural Societies having been registered, bringing the total of all societies registered up to 14,510, as compared with 13,357 societies at the close of the previous year. The total number of members in all societies at the close of the year was 898,186 as compared with 830,522 in the previous year. The percentage of society membership to the population of the Presidency was 2·1 compared with 1·94 in the previous year. There were 18 land mortgage banks at the end of the year, against 10 in the previous year, with a membership of 1,024 and a paid up share capital of Rs. 60,787. Nine more milk supply societies were added during the year to the 11 already in existence, and excellent work was done by the 9 reclamation societies during the year. Labour Contract Societies were able to secure contracts for Rs. 2,38 lakhs, and actually completed work within the year valued at over 3 lakhs. The Madras Government granted a loan of Rs. 2,700 to an irrigation society for the purpose of installing plant and machinery for lifting water. The Committee on Co-operation appointed by Madras Government in September, 1927, issued their report during the year, and its recommendations are still under consideration.

In spite of a bad season in many localities the progress of the co-operative movement in the Bombay Presidency continued to be satisfactory. There was an increase of 239 societies over the figure of the previous year, making a total of 5,330 societies at the close of the year. The number of members rose from 482,730 to 539,470, and the increase in the working capital by nearly a crore of rupees is astonishing. The immense figure of 11¼ crores illustrates the large part which the co-operative movement is playing in the economic life of the Bombay Presidency. At the same time one of the disquieting features of the year was the alarming increase in the unauthorised arrears, which amounted to Rs. 105 lakhs, out of Rs. 317 lakhs due for repayment during the year. The number of agricultural non-credit societies decreased from 264 to 257 during the year, and some of the societies which were not working were cancelled. This side of the movement is still in its infancy, and until non-official workers with some knowledge of business methods and a supply of competent and honest managers are available very little progress can be expected. The Provincial Co-operative Bank continues to be the centre of co-operative activities in all its various aspects. Three more up-country branches were opened during the year, bringing the total number of branches to 19. Three Land Mortgage Banks were started in the districts of Broach, Dharwar and East Khandesh during the year. The number of central banks was 19, compared with 20 during the previous year, and loans to societies rose from 147 to 170 lakhs. There was an increase in the number of Housing Societies from 47 to 52, and with a view to dealing with the floods in Gujerat and Sind, a special type of Housing Society had to be organised. Fifty-three Reconstruction Societies were registered during the year, 22 in Gujerat and 31 in Sind, and loans amounting to Rs. 4 lakhs were advanced to 38 societies.

The year 1927-28 was by no means a prosperous one for the co-operative movement in Bengal. Insufficiency of rainfall in the early part of the year, followed by a deficiency in the latter part of October, 1927, materially affected the outturn of winter paddy throughout the province. The market was also unfavourable for jute, and in some cases the price was so low that the people could not even get an adequate return for their labour. Altogether the economic conditions were decidedly unfavourable for the agriculturist in Bengal. In the Chittagong division these conditions were further aggravated by epidemics of cholera and smallpox,

while floods and landslips caused serious distress in some parts of the Darjeeling District. The arrangements entered into with the Imperial Bank of India regarding financial assistance to the co-operative movement came into full operation during the year. The Provincial Bank had two cash credits with the Imperial Bank, one for Rs. 30,49 lakhs against securities lodged with the Bank, and the other for Rs. 10 lakhs on the security of the pro-notes of Central Banks. The local branches of the Imperial Bank allowed cash credits for Rs. 3,43 lakhs to some of the Central Banks on the guarantee of the Provincial Bank. This growth of financial relations between the Imperial Bank and the Co-operative Movement will remove the complaints which are often made that the banking system set up by Government is designed wholly to meet the needs of the persons who move the crops and the manufacturers who prepare the crops for export, but not the persons who produce the crops. The total number of societies at the close of the year was 18,107 against 15,439 in the preceding year. The number of members rose from 547,325 to 635,959, and the total working capital of all societies rose from Rs. 9,43,42,218 to Rs. 11,10,01,532. The Bengal Provincial Co-operative Bank made satisfactory progress during the year, the increased deposits from non-members amounting to 102·93 lakhs—further evidence of growing public confidence. During the year the Bank opened a Savings Bank Department and introduced Home Safe Boxes. Steady progress was made in the industrial and producers societies, the sale and supply societies and, in fact, every other phase of the co-operative movement in the Bengal Presidency.

The most important event during the year in the co-operative movement in the United Provinces was the registration of the United Provinces Co-operative Union. The Union replaces the Standing Committee of Co-operators, a merely advisory body, and relieves those central banks, which have joined it of the duties of supervision of primary societies and leaves them free to devote themselves to finance, which is their proper function. Government sanctioned a grant of Rs. 20,000 to enable the Union to maintain a competent and efficient staff. Three new inspectors were appointed during the year, and one additional inspector was appointed for cottage industries, bringing the total to 51. The policy of the Co-operative Department in closing down bad societies and removing undesirable members resulted in a fall of 177 in the number of primary agricultural societies during the year, which

now number 5,697 as against 5,874 in the previous year, and a decrease in the total membership by 9,000. Two new Central Banks were registered during the year, but the Central Weavers Bank of Sandila had to be liquidated, as also the District Bank at Budaun. Money due to the Central Banks increased from Rs. 60·82 lakhs to 63·22 lakhs. The total capital involved in the movement is Rs. 201·86 lakhs, and of this Rs. 80·4 lakhs represented paid up shares and reserve fund, or roughly 42 per cent. There was an increase in overdue loans during the year from Rs. 28·43 to Rs. 31·82 lakhs, which now amounts to 41 per cent. of the outstandings, against 39 per cent. in the previous year. The Department is now directing its main efforts towards the reorganisation of existing societies and the spreading of the true ideals of co-operation. It is difficult to get the population to realise that the meaning of co-operation is not merely to lend money at cheap rates, but to improve the business of the cultivators, their farming and their standard of living, so that they are in a position to earn more and produce more.

The co-operative movement in Bihar and Orissa continues to make good progress on sound lines. During the year 1928 no less than 627 new societies were registered, bringing the total number of societies of all kinds up to 9,111. Three new Central Banks were organised during the year, making a total of 68 in the province. One hundred and three societies went into liquidation during the year, and as an experimental measure a whole-time liquidator was appointed for the District of Gaya. It has been found that liquidation proceedings under the guidance of Central Banks are not expeditiously carried out, resulting in the accumulation of interest due to members and confusion in the accounts. In interest alone the savings to members is calculated to amount to Rs. 10 lakhs a year, which is reflected in their deposits amounting to Rs. 4½ lakhs in 1926-27. The co-operative movement in Bihar and Orissa is predominantly rural, as may be gathered from the fact that during the year under review there were 8,300 primary societies, of which no fewer than 7,934 were agricultural societies. The working capital of the societies, which is nearly all given out in loans to the members, was well over Rs. 2 crores, and the reserve stood at Rs. 25 lakhs. The classification of primary societies showed an improvement during the year—the number of societies classed as " bad ", and " hopeless " being much lower than in the preceding year.

In the Central Provinces the process of eliminating bad societies continued during the year, and consequently the total number of societies of all kinds fell from 4,124 to 4,049. In spite of this fall, however, there was an increase in membership and the amount of invested working capital. The total loans increased from 59·81 lakhs to Rs. 63·7 lakhs in the Central Provinces, and from Rs. 88·2 lakhs to Rs. 89·9 lakhs in Berar. Overdues amounted to Rs. 23·5 per cent. in the Central Provinces and 17·5 per cent. in Berar. The total number of Central Banks was 35 during the year, and the financial position continued to be sound. Share societies are being formed with a view to train the members in the management of their own affairs. The number stands at 578 against 323 in the previous year.

The principal feature of the year with regard to the co-operative movement in Burma was the Government's resolution on the annual report of the department, which stated that "for the present, at any rate, control must be tightened up and the movement closely supervised." An intensive campaign to stimulate repayments by the Societies of certain districts was carried out between December, 1927, and May, 1928, but it was a complete failure. Of Rs. 52·75 lakhs principal due from societies in nine Districts on January 1st, 1928, less than Rs. 3·25 lakhs had been collected by June 30th, 1928, and these repayments came almost wholly from the minority of comparatively honest societies which had always made more or less reasonable efforts to pay their debts. The total membership declined from 139,401 in the preceding year to 137,328, deposits by members from Rs. 13·57 lakhs to Rs. 12·37 lakhs, and by non-members from Rs. 149·03 lakhs to Rs. 144·52 lakhs. At the close of 1926-27 there were 119 Urban Societies, including two wound up but not disregistered. At the end of the year under review there were 121 non-disregistered societies, of which 17 had been wound up but not yet disregistered. The Burma Urban Central Co-operative Bank was ordered to be wound up as a result of the audit report for the year ending June 30th, 1928, and on examination of the Bank's books by the liquidators a number of prosecutions were instituted against various persons connected with the Bank.

The expansion of the co-operative movement in Assam continued steadily, the number of societies increasing from 1,066 to 1,197, and the membership from 53,411 to 60,575. There were 15 Central Banks at the close of the year, and the loans issued to affiliated

societies amounted to Rs. 5,09,134 against Rs. 4,25,881 in the preceding year. Three new non-credit societies were organised and two dissolved during the year, the total number at the close of the year being 19. There has been steady progress in almost all directions in the co-operative movement, the only dark spot being the high percentage of overdue loans. The Board of Development have submitted some important recommendations to Government during the year, which are now under consideration.

* * *

From what has been written in earlier chapters, the importance of the part played by cottage industries in rural economics in India is obvious. Departments for the development of industries are in existence in Madras, Bombay, the Punjab, the United Provinces, Bengal and Bihar and Orissa, and amongst their functions is that of the supervision and assistance of rural industries. An Industrial Loans Act has been passed in the Punjab, while Madras and Bihar and Orissa have passed State-Aid to Industries Acts. Under these measures assistance can be given from provincial revenues, subject to certain conditions, to private enterprise for starting new industries. Wherever there is an Industries Department, the development of rural industries benefits to a considerable extent, and much good work has been done in the various provinces during the past few years.

The survey of cottage industries in 1927 in Madras, with a view to their revival and establishment on an economic basis as subsidiary occupations for agriculturists, was almost completed at the close of the year 1928. The Government Kerala Soap Institute at Calicut employed 12 students for training in soap manufacture for a year's course. The Industries Department continued to develop a number of existing industries and the peripatetic weaving parties gave practical demonstrations of improved machinery with satisfactory results. The Department maintained 5 schools, and during the year under review aided 66 private schools with grants, and awarded scholarships for the study of technical subjects in India and abroad. A Bill amending the State-Aid to Industries Act with a view to extending its benefits to small scale industries and cottage industries was passed by the Madras Legislative Council during the year.

In Bengal the chemical section of the Industrial research Laboratory was completed during the year under review, making a large range of scientific investigations now possible. Important

research work into the composition of match-heads, soap, shellac, and the bleaching of hosiery was undertaken during the year with a view to the better utilisation of raw materials. The Bengal Tanning Institute carried out a number of important researches into the manufacture of sole leather, chrome picking bands, laces and straps, and leather from buffalo hides. Since last year's report was published many students have started small tanneries with success, and the demonstrators deputed to tour the province have rendered useful assistance. The Government Weaving Institute at Saharanpur continued its constructive work in the revival of the handloom weaving industry during the year. Fourteen new peripatetic weaving schools were opened, and the silk weaving and dyeing institute at Berhampore opened its session with sixty students. Approval was also accorded for a new scheme for the establishment of nine additional peripatetic weaving schools. There are at present 127 technical and industrial schools in Bengal, of which 51 are managed by Government, 5 by local funds and Municipal Boards, 64 receive Government aid, whilst 7 schools are under private management unaided by Government. With an increase of 30,000 per annum in arithmetical progression for three years in the grant-in-aid allotment, the work in this branch of the department was further developed, and a new technical school at Krishnagar was completed during the year. Two three-year State Technical Scholarships for the study of ferro concrete and steel building construction and pottery manufacture in England were awarded during the year.

In the United Provinces the Government have aimed at raising the standard of technical training by expanding educational facilities and demonstrating improved processes and appliances. Every effort is made to assist the industrialist by placing at his disposal a research staff ready to solve the problems that arise in his business, and by collecting useful information relating to industry. Eleven new schools were opened during the year, and the total number of these institutions is now 112 with nearly 3,500 scholars. Eight short-term foreign scholarships were awarded for various subjects during the year and two long-term scholarships were awarded respectively in mechanical and electrical engineering and sugar technology. Demonstrations were given in weaving, leather working, dyeing and printing at various exhibitions in the province, and a very successful departmental exhibition was held at Lucknow, which was attended by 12,000 people and at which the sales

amounted to Rs. 14,000. The problem before the Industries Department in this province, so far as cottage industries are concerned, is not so much to improve manufacture as to assist in the disposal of the products at competitive rates. The percentage of the value of goods of Indian manufacture to the total purchases of imported goods increased from 60 the previous year to 66 during the year under review.

The Department of Industries in Bihar and Orissa was created as recently as 1920 to supervise the provision of technical and industrial education, and to stimulate the industrial development of the province. In 1923 a State Aid to Industries Act was brought into force, since when aid in the form of loans and cash credits has been granted to the extent of nearly 6½ crores of rupees. Next to agriculture the hand loom weaving industry is the most important occupation of the people of this province. In the census of 1921 no less than 164,592 handlooms were working in the province, weaving each year an average of 20 million pounds of yarn, mostly of coarse counts, into cloth worth nearly 5 crores of rupees. Although the greater number of looms weave cotton, silk and wool are also woven to a considerable extent. That the hand weaving industry of Bihar and Orissa is holding its own is evident from the fact that whereas in 1912-13 one-seventh of the cotton cloth woven in the province was of local manufacture, the proportion had risen to over one-sixth at the end of the decade. The Bihar College of Engineering had a satisfactory year and the number of applicants for admission to the civil engineering class increased from 93 to 104, of whom 30 obtained admission. The examination results were satisfactory, but there was a considerable falling off in applications for admission to the subordinate classes and also to the mechanical apprentice classes. The work of the textile branch consisted mainly in the introduction of improved appliances among weavers and other classes of artisans by means of demonstration parties, practical training at Government Institutes, and the introduction of improvements in the trade organisation of such industries. This branch also aims at securing wider markets for the product of cottage industries by introducing improved patterns and by advertising both in India and in Europe. The expenditure on industrial and technical education in the province during 1927-28 amounted to over 5½ lakhs, or more than two-thirds of the total expenditure of the Industries Department.

The Central Provinces Industries Department had a successful year in spite of a prolonged depression in the cotton industry. Propaganda for the demonstration and introduction of fly shuttle sleys was carried out with increasing success, and instruction in improved methods in dyeing was imparted to several institutions in Nagpur. Two new aided industrial schools were opened during the year, and a continuation class of carpentry pupils was opened at Akola. The construction of a Government School of Handicrafts at Raipur has been taken in hand, and in various other directions progress was made in industrial education.

The industrial element forms only a small proportion of the population in Burma, where the majority of the people are engaged in agriculture. Rice-milling, petroleum winning and refining, the extraction and conversion of timber, mining and transport were the most important industries during the year under review. A special enquiry revealed the existence of no less than 300 small mills employing under 20 persons—mostly rice and saw mills. Thirty additional factories were registered during the year, thus continuing the steady annual increase by about that number for the last five years. There were 940 working factories during the year against 923 last year. The total number of persons employed in all industries increased by about 600 to 101,350. Of these 10,500 were women (an increase of 1,000) and 1,090 children (a decrease of 250).

The Assam Industries Department continued to do useful work during the year in its main lines of activity, namely the encouragement of handloom weaving and sericulture and the spread of technical and industrial education. The new buildings of the Gauhati Weaving Institute were completed during the year. Three weaving parties were at work in various parts of the province. Experimental work continued at the Titabar and Shillong sericultural stations, and the appointment of six demonstrators for work in selected villages was sanctioned during the year. The Fuller Industrial School at Shillong continued to turn out passed students in carpentry and smithy work, who subsequently secured useful employments in the District. In addition to the State Technical Scholar who had been undergoing training in Great Britain in mineral oil extraction and refining, seven stipendiaries were under training in miscellaneous industries outside the province. There were 16 apprentices under training in the various railway workshops of the province during the year.

CHAPTER XI.

Archæology in India.

One of India's greatest glories to-day is the work of the Archæological Department, which during the last quarter of a century has provided the material for solving some of the most important problems in human origins and existence. The year 1928-29 was an important one for archæology, as the record of work done by the Indian Archæological Department which follows clearly shows. During the first week of April, 1928, a new museum was opened to the public at Taxila (in the North-Western Punjab) by Sir Mohammad Habibullah, K.C.S.I., K.C.I.E., Kt., the Honourable Member for Education, Health and Lands. Allusion to this museum was made in last year's report but it deserves more than the cursory notice that was then accorded it, for apart from the unique character of its collections, the building itself is an exceptionally fine one and takes a pre-eminent place among all the local museums of this country. Simple and chaste in design, spacious, well lit, solidly constructed and admirably finished in every detail, it provides a standard for such structures as high as can at present be hoped for. In erecting these local museums on ancient sites excavated by the Archæological Department, it has been the aim of the Government of India to keep the small and movable antiquities recovered from them in close association with the remains to which they belong, so that they may be studied amid their natural surroundings and not lose focus and meaning by being transported to some distant place. The objects preserved in these local museums are all-important to the student, if he is to visualize aright the conditions of life in Ancient India and to infuse life and colour into his picture. But it is obvious that local museums, such as the one at Taxila, are too costly to be maintained on every site that is excavated. They are justified only if the antiquities housed in them are sufficiently numerous and valuable, and if the site itself is reasonably accessible to the public. At Taxila, both of these conditions are fulfilled. On the one hand the new museum is only a few hundred yards distant from a railway junction on the North Western Rail-

way, and it can easily be visited by rail or motor car from Rawalpindi. On the other hand the collection of objects in it is exceptionally varied and rich. It covers a period of a thousand years and more—from the sixth or seventh century B.C. to about the 5th century A.D.—and it illustrates the peculiarly cosmopolitan culture that prevailed during most of that period in the North-West of India, where Greek invaders succeeded Persian, and were themselves followed by Scythians, Parthians, Kushans and Huns; where elements from the arts and crafts of all these heterogeneous nations became inextricably blended with the Indian; and where the Brahman and the Buddhist flourished side by side with the Jain and the Fire-worshipper. Moreover, this is the only collection in India which contains a representative display of the arms, implements, utensils and other objects which were in daily use among the people of historic times. In European museums such objects are, of course, abundant and have done much to illumine the story of civilisation. In India they have hitherto been all but unknown, for the reason that it was only within the last three decades that scientific excavation has been essayed in this counry, and during these decades the efforts of the Archæological Department have been largely taken up with the great religious centres of antiquities such as Sarnath, Sanchi and Rajgir, which though supremely interesting in other respects, have necessarily yielded few objects of this kind.

While the Archæological Department has thus been doing everything possible to make the new-found treasures of Taxila accessible to the public, it has simultaneously been pushing on with the systematic exploration of the ancient remains. This year, with the completion of the " Palace " excavation and the clearance of several extensive blocks of houses on the east side of the Main Street, it has virtually brought to a finish—at any rate for the time being—its operations in the Scytho-Parthian city of Sirkap, and has already set about opening up the earlier strata of remains underneath. As the spade goes deeper, the area that can be excavated for a given sum necessarily grows less and less and it is not to be expected, therefore, that the excavation of the lower cities will yield as rich a harvest of antiquities as the Scytho-Parthian city has done. Nevertheless, to judge by what has already been achieved, there is every prospect that the excavators will succeed in pushing back the story of this civilisation for several more centuries.

GALLERY IN THE NEW TAXILA MUSEUM.

In the Madras Presidency exploration of the Nagarjunikonda site, in the Guntur District, resulted in the recovery from various stupas of six gold and five silver reliquaries. The relics found in the Great Stupa, which may apparently be assigned to the 2-3rd Century A.D., are of special interest as the inscriptions from the monument state that it was erected by a princess of the Ikkhaku dynasty to enshrine a relic of the Buddha himself. The actual relief is a small bone fragment no larger than a pea and was found in a small gold reliquary which was itself enclosed in a small stupa-shaped silver casket together with a few pearls, garnets, flowers of thin gold foil and rock crystal beads. Numerous sculptures in the Amaravati style and illustrating scenes from the life of the Buddha and from the Jatakas were also recovered from the neighbouring excavated mounds.

Excavation at Paharpur, in the Rajshahi District, Bengal, resulted in the uncovering of some of the cloisters on the east and west of the main temple. At the same time the conservation of the latter structure was taken in hand. But the principal excavation in Bengal was carried out at the city site of Mahasthan which has so long attracted the attention of archæologists. Though the results were disappointing and the structural remains revealed scanty and of no special importance it was plain that the site must have been occupied as early as the 4-5th Century A.D. and inhabited until the Muhammadan conquest. In the Govinda mound, just outside the city and seemingly marking the site of a Brahmanical temple, the remains of massive buildings of at least three periods of occupation from the 7th Century to the coming of the Muhammadans were traced. Trial excavation at Rangamati, in the Murshidabad District, revealed some structural remains of the 6-7th Century and some stucco fragments of Buddha figures, but nothing sufficient to identify this site with the " Raktamrittaka " *vihara* mentioned by Hiuan Tsang.

In Bihar and Orissa conservation of the important Buddhist site of Nalanda continued *pari passu* with its further exploration. In conserving these remains, which range in date from the 6th to the 12th centuries, an endeavour is being made to exhibit a definite portion of each of the several structures erected on the ruins of others throughout the long occupation of the site, and the earth ramps which, in accordance with this design, had been left between the three earliest levels of occupation exposed in the centre of

Monastery No. 1 have been made secure with a facing of rough concrete to represent the original debris and protect them from erosion.

Excavation in Monastery No. 4 has gone down to the earliest levels in the northern area with a view to retrieving minor antiquities. Those recovered included bronze images of the Buddha, Kuvera, Avalokitesvara and Tara, and some objects in iron, including two ancient locks,—one complete with keys—a censer and a lamp stand. These were all of the Deva Pala period. Of the pre-Deva Pala period only one antiquity of interest was recovered—a gold piece of Kumara Gupta I, Mahendraditya, C. 413—450 A. D. In this area three levels of occupation are also displayed. Excavation in Monastery No. 6 revealed the cells, verandah and courtyard of an earlier monastery of almost identical plan with the one of later date standing above it and disclosed last year. Necessary underpinning has been carried out to preserve the remains of both periods. Round the Main Stupa clustered some fifty little votive stupas, the gift of pious devotees through several centuries. These have been repaired and provision has been made for the drainage of the eastern part of the mound where portions of the facades of stupas of two periods have been disclosed. Important finds from other parts of the site are a relief depicting scenes from the life of the Buddha, little terra cotta votive stupas impressed with what appear to be the seals of donors, and a fragment of an inscribed stone.

Excavations in Burma at Hmawza (Old Prome) and Pagan yielded little of interest save a small image of Ganesa and several figures in stone and terra cotta of a pot-bellied personage seated in *dhyana-mudra,* on a lotus throne. These images are seemingly assignable to the 9-10th Century.

The important pre-historic sites of Mohenjo-daro and Harappa continued to receive systematic exploration. At the former site work was limited to the excavation of the lower strata of a large area of which the upper level had been partly excavated last year. Three strata of occupation were traced under the somewhat inferior buildings which crowned the mound. The earlier buildings were markedly superior in both masonry and plan. A large area some twenty-three feet below the original surface of the mound and marking the fourth level of occupation has now been reached and exposed to view, and in this fourth stratum it is now possible to walk through the streets and to enter many of the buildings of the

period as easily as did its original inhabitants. The site is an impressive one, the walls on either side of the street standing in many places over sixteen feet high, and it is interesting to note the various additions made to them in former days as the level of the ground rose during the long occupation of the site. The antiquities recovered resemble for the most part those found in former years, but the copper tools and implements are of particular importance, as are also some of the seals which the site continues to yield in great abundance. On three of the latter are seeming religious scenes of a novel character which may throw light on the various cults of the Indus civilisation. It would appear as if tree-worship was already in vogue, and there is every probability that certain gods worshipped to-day in India are survivals from this Indus culture. These new seals are definitely Indian in feeling though others seem to betray Mesopotamian or Elamitic influence. The opening of the new museum at Mohenjo-daro has added greatly to the attractiveness of the site. Show-cases have now been installed and visitors have fully availed themselves of the opportunity of inspecting the numerous and varied antiquities.

Owing to the dilapidated state of the lower parts of the excavated walls, due to the presence of salts in the soil, underpinning has been necessary. It is interesting, in this connection, to note that the ancient inhabitants had been compelled, for precisely the same reason, to take similar measures. On the Stupa Mound the ravages of time have, as far as possible, been repaired and loose masonry secured by being relaid in lime mortar.

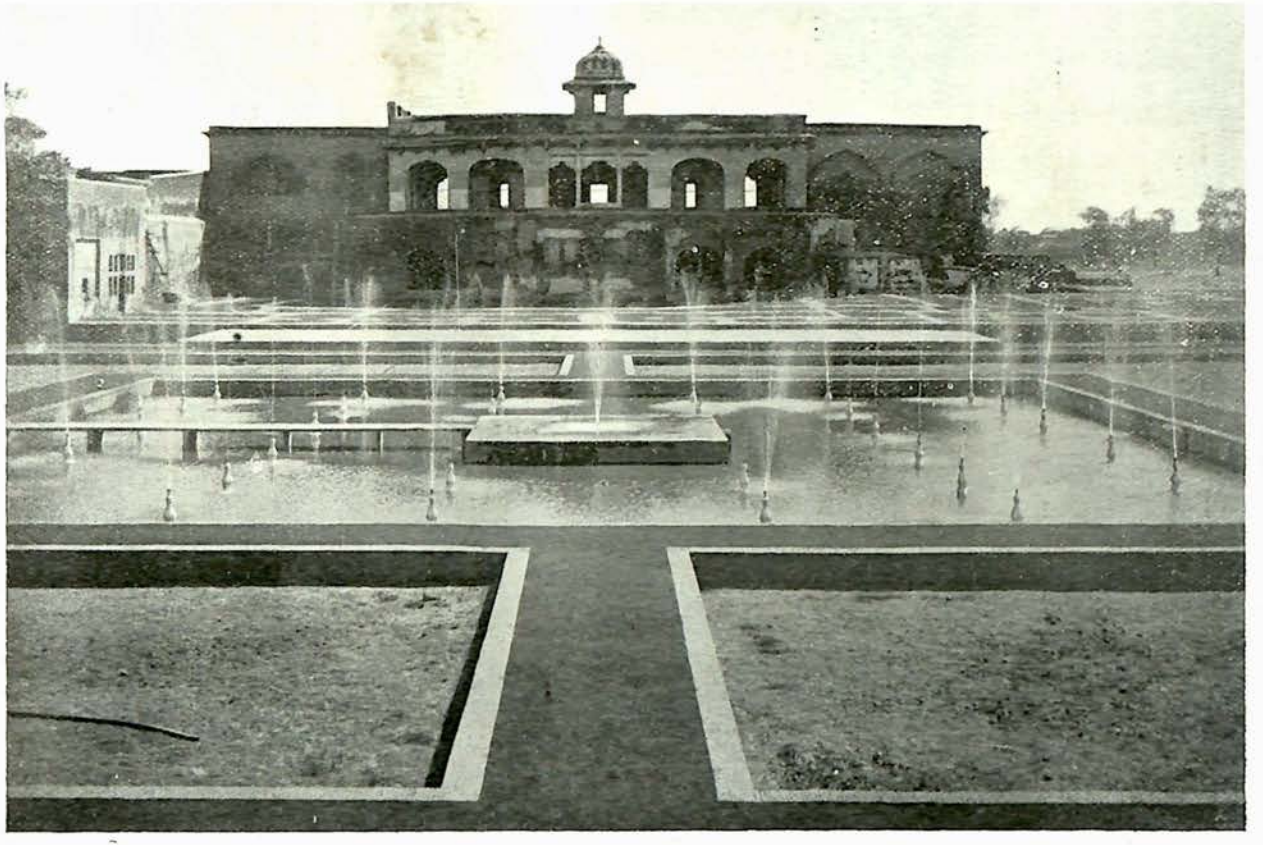
Harappa, like Mohenjo-daro, yielded for the most part antiquities similar to those recovered in former years. A find of jewellery consisted of gold, silver, faience and shell objects and no less than one hundred and sixteen seals and sealings were obtained. Thirty-one cylindrical terra-cotta sealings bearing a unicorn on one face and four pictographs on the other were identical, and seemingly from one matrix. The unicorn, elephant, bull, goat and crocodile were the animals usually depicted on seals and sealings. Two of the latter are mythologically interesting—one showing a god standing under an arch of *pipal* leaves, the other displaying a deity under a similar arch faced by a kneeling, adoring figure seemingly imploring the acceptance of a goat which stands behind him. Pictographs were found at Harappa not only on seals and sealings but on a jar and on twenty-three potsherds. The structural remains

were scanty, the most noticeable being ten circular structures constructed of brick on edge only one course in thickness. Their purpose cannot at present be surmised. Seven burial jars were recovered and successfully removed to the museum where the skeletal remains await examination by an anthropologist.

Though the majority of the antiquities recovered this year at Mohenjo-daro and Harappa present no new feature of outstanding interest the new types of seals and sealings are of the greatest importance as they give a stronger Indian than Western orientation to this Indus valley culture and it is not improbable that at these sites may later be recovered definite prototypes of Indian deities and traces of art motifs and cults which persist to the present day.

A recently compiled consolidated list of monuments protected under the Ancient Monuments Preservation Act reveals the interesting fact that no less than three thousand one hundred and seventy are maintained by the Central Government alone. They include ancient sites, baths, bridges, caves, forts, gardens, gateways, inscribed rocks, images, serais, kos minars, mosques, monasteries, palaces, pillars, pagodas, tombs, tanks, towers, temples, wells and the walls of ruined and deserted forts and cities as well as some four hundred miscellaneous objects and buildings. On the maintenance and repair of these numerous monuments are expended the greater part of the archæological funds and the energies of the officers of the Department.

In the Punjab conservation has now been taken over from the Public Works Department by the Archæological Department and special repairs were executed at fourteen monuments. The principal work has been the continuation of the restoration of Lahore Fort, where great progress has been made. In Jahangir's quadrangle the ancient pathways and fountains have been restored and the ground levelled for the parterres. The courtyard to the north of the Diwan-i-Am has been levelled and arrangements made for the planting of shrubberies to mark the enclosing *dalans*. The dismantling of modern additions has proceeded apace and furnaces and flues of the old *Hammam* (bath) are gradually being revealed. Conservation was also carried out at Begam-ki-Serai, at Attock, Akbar's last serai on the road to Kabul, and situated close to the fort and bridge of boats he set up there. Gradual restoration of the now lost chabutras and causeways of Jahangir's Tomb at Shahdara is contemplated and some progress towards them has been made



NEWLY RESTORED CAUSEWAYS AND FOUNTAINS IN JAHANGIR'S QUADRANGLE, LAHORE FORT.

by reconstructing the portion leading from the entrance gate towards the tomb. An engineering staff having been attached to the Frontier Circle, it became possible to devote attention to the monuments of the North-West Frontier Province, and the repair of the large breach in the western revetment wall of Takht-i-Bahi has been taken in hand as well as the conservation of the dilapidated walls of the chapels in the principal courts.

In the United Provinces conservation was carried out at the Gupta Temple, Deogarh, Jhansi District, at Kasia (Kusinara), at the groups of ancient temples at Jogeshwar and Katarmal, in the Almora District, and at the Lakhamandal Temples, in the Dehra Dun District, as well as at Akbar's Tomb, the forts of Agra, Aligarh and Jagner, at the monuments of Fatehpur Sikri, Cawnpore and Jaunpur, while works which had been in progress for three years at Itimad-u-Daulah's Tomb at Agra were carried to completion. In the Delhi Province special attention was devoted to the Fort, Purana Qila, Bijai Mandal and to Safdar Jung's Tomb.

Conservation in the Central Circle was undertaken at Rajgir, in the Patna District, where a short length of the New Fort Wall embracing the south gateway is being repaired. This fort, believed to have been founded by Bimbisara of the Saisunaga Dynasty, was completed by his son Ajatasatru in the 6th Century B.C. These monarchs were contemporaries of the Buddha who visited Rajgir and spent considerable periods in the neighbourhood. The base of the wall is being cleared of debris and the old cyclopean masonry exposed, the huge stones recovered in clearance being reset in the wall in the positions from which they fell, and the jambs of the gateways built up in strict accordance with the original evidence. At Man Singh's palace, in the Fort at Rohtas, restoration of the attractive but dilapidated oriel-balconies has been put in hand and repairs have been executed at the famous Suri tombs at Sassaram. The old Barabati Fort at Cuttack, the Gond City Walls of Chanda, the temple of Sita Devi at Deorbiji, the Kanthi Dewal Temple at Ratanpur and the Bibi-ki-masjid at Burhanpur, the Nurnalla Fort in the Akola District and a very interesting Kund of the late mediæval period at Lonar in the Buldana District have also received attention.

Monuments in Bengal and Assam are comparatively few, but special repairs to Baba Adam's Mosque at Rampal were completed, and in Assam the scattered remains of a stone temple in the Bamuni

Hills, Darrang District, were collected, and carefully arranged, the plan of the central temple and subsidiary shrine being disclosed by excavation. Similar treatment of the ruined structure at Jaysagar, Sibsagar District, has revealed the plinth and remains of the Karanghar palace of the Ahom kings.

No less than sixty-one special repair works were taken in hand in the Bombay Presidency. These included the Faria Bagh Palace at Ahmadnagar, Galteshvara Mahadeva Temple at Sarnal, Rock-cut temples at Karla and Jogeshwari, Portuguese remains at Bassein, the rampart walls at Shanwar Wada in Poona City, the domes of Bahlol Khan Qazi's Masjid at Dholka, the retaining walls of the Mansar Tank at Viramgam, Sayyad Usman's Masjid and Tomb at Usmanpura, Gol Gumbaz at Bijapur, Tarakeswara Temple at Hungal, and the tombs of the Farruqi kings at Talner. Access to the caves on the west side of the hill fort at Swaneri at Junner having hitherto been both difficult and dangerous, foot-paths have now been provided. On the ceiling of Cave No. 56 traces of painted ornamentation in red, yellow, black and white have been recovered. Removal of debris from the Godhra gate at Champaner disclosed a number of stone cannon balls and a large quantity of chain and plate armour damaged by fire and fused into large masses by the heat.

Repairs were carried out in the Madras Presidency to the Buddhist remains at Anakapalli, Ramatirtham, Ghantasala, Jaggayyapeta and Amaravati, the Pallava temples at the Seven Pagodas, and the Vijayanagar monuments at Hampi, Gingee, Penukonda and Chandragiri, while in Burma attention was devoted principally to the Thamphula and Nandmann temples at Minnanthu, Pagan, which contain interesting frescoes affording unmistakable evidence to the former prevalence in Burma of a Tantric Buddhism long replaced by that of the Theravada School.

* * *

One of the most important discoveries of the year is that of another recension, in the Brahmi script, of the Fourteen Rock Edicts of Asoka and one of the Minor Rock Edicts. These are situated some eight miles from the town of Gooty on the road to Pattikonda and close to the village of Yerragudi, situated approximately in 77° 34′ E. L. and 15° N. L.

The Yerragudi edicts are inscribed on five boulders of hornblendic gneiss situated on a prominent rocky hillock known locally

Newly Discovered Rock Edicts of Asoka, Yerragudi, Kurnool District.

as Nellayenakonda, or more simply Yenakonda, which means the "elephant hill". The principal inscribed rock is near the summit of the hill, the others being situated on the spur to the south. The edicts so far identified are Nos. I—V, VII—XI, XIII, XIV and one Minor edict. Edicts VI and XII have not yet been traced. All the five inscribed rocks are rough undressed boulders. The new set of edicts is practically identical with those at Girnar, Kalsi, Shahbazgarhi and Mansehra, and the Minor edict is a somewhat fuller edition of the Brahmagiri and Siddapura edicts. The Yerragudi edicts are not engraved in any definite sequence. Edicts I and II are engraved on the left end of the south face of rock one, Edict III in the middle portion and XIV at the upper right corner. Six lines of a much defaced inscription are visible below Edict III. This may have been Edict VI, but it has not yet been definitely identified. Edicts XI, V and VII occupy the east face of the same rock. The front or southern face of the second rock, a large pointed boulder, has part of Edict XIII on the left face, the remainder appearing on the horizontal surface of rock five. The right hand portion of rock two contains Edicts, IV, VIII and X. Edict IX, inscribed on rock three, is fairly well preserved. The Minor rock edict is engraved on the south sloping face of rock four, and is the best preserved of all the inscriptions but, unfortunately, the first few lines are completely defaced and it is impossible to state whether, like the Brahmagiri and Siddapura edicts, it was also issued from Suvarnagiri. The dialect of the Yerragudi edicts agrees closely with that of the Kalsi and Girnar recensions and exhibits linguistic peculiarities. The inscriptions recovered in February, 1929, have yet to be studied in details, and though apparently supplying no new information of historical importance are nevertheless evidence of the extent and activity of Asoka's administration.

The other inscriptions in the early Brahmi script exist in and around Yerragudi is proved by traces of early records on boulders on a hill near the village of Mainapur about a mile west of the Yenakonda hill.

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On pages 187-188 of "India in 1926-27" it was mentioned that the Government of India had sanctioned the entertainment of a whole-time staff for archæological explorations in India. This staff was engaged upon a permanent basis, except the Deputy Director

General of Archæology for Exploration and the three Assistant Superintendents, who were placed on a temporary footing for a period of two years with effect from the 1st October, 1926. These four superior posts have, with the sanction of the Secretary of State, now been placed on a permanent basis, and it has been decided that the tenure of office of the Deputy Director General of Archæology for Exploration should normally be three years, as in the case of the Deputy Director General of Archæology. Certain other proposals designed to place the excavation work of this Department on a thoroughly satisfactory basis have also been sanctioned, including *inter alia* the training of four apprentices at Mohenjo-daro with a general view to their eventual employment in the Archæological Department, and the grant to these apprentices of four scholarships of a value of Rs. 75—100—125 a month each, tenable for three or four years on the conditions which apply to existing archæological scholarships.

* * *

For over twenty-six years Sir John Marshall has been Director General of the Archæological Survey and has, during that period, acquired an unrivalled knowledge of the monuments and antiquities of India, knowledge which none of his successors holding the appointment for a few years at the end of their service can ever hope to obtain. During those twenty-six years the Archæological Survey has continually extended its activities and responsibilities until the whole attention of the Director General is now absorbed in routine administrative duties. It was felt by the Government of India that the burdening of Sir John Marshall by such duties was detrimental to the interests of Indian Archæology, and in September, 1928, he was placed on Special Duty in order to provide him with an opportunity of writing and publishing the materials collected by the Archæological Department and himself during his long period of office. While on Special Duty Sir John Marshall will write a series of books on the excavated sites of Mohenjo-daro, Harappa and Taxila, as well as on the monuments of Sanchi, Mandu, Delhi, Agra and Multan. At the same time he will continue to hold charge of the excavations at Taxila, which have been under his direct control for sixteen years, and also co-ordinate the results of the operations of the Archæological Department on the prehistoric sites of the Indus and allied cultures.

APPENDIX I.

SOURCES.

List of Indian Official Reports, etc.

(Mostly Annual.)

General.

Statistical Abstract relating to British India (Parliamentary Paper).

Statistics of British India:—

Vol. I.—Commercial.
Vol. II.—Financial.
Vol. III.—Public Health.
Vol. IV.—Administrative and Judicial.
Vol. V.—Educational.

Census Reports (Decennial), India, Provincial, and Native States.

Administration Reports: Madras, Bombay, United Provinces, Punjab, Bengal, Central Provinces and Berar, Burma, Bihar and Orissa, Assam, North-West Frontier Province, Delhi, Coorg, Andaman and Nicobar Island, Civil and Military Station of Bangalore, Ajmer-Merwara, Baluchistan Agency.

Legislation.

Acts of the Imperial and Provincial Legislative Councils.

Justice and Police.

Report on the Administration of Civil Justice for each Province.

Report on the Administration of Criminal Justice for each Province.

Report on Jails for each Province.

Reports on Police for each Province, and for Bombay Town and Island, Calcutta, and Rangoon.

Finance.

Finance and Revenue Accounts of the Government of India.

East India Financial Statement (Parliamentary Paper).

Return of Net Income and Expenditure for eleven years (Parliamentary Paper).

Accounts and Estimates: Explanatory Memorandum (Parliamentary Paper).

Home Accounts (Parliamentary Paper).

Loans raised in England (Half-yearly Parliamentary Paper).

Loans raised in India (Half-yearly Parliamentary Paper).

Mint Reports for Calcutta and Bombay.

Paper Currency Department Reports, India and Bombay.

Statistics compiled from the Finance and Revenue Accounts.

Land Revenue, etc.

Land Revenue Administration: Provincial Reports for Lower Provinces (Bengal), Bihar and Orissa, Assam, United Provinces, Bombay Presidency (including Sind), Punjab, Central Provinces and Berar, Burma, and Madras.

Report on Land Revenue Administration, Land Records, Settlement Operations, Alienation of Land Act, etc., for North-West Frontier Province.

Madras Survey, Settlement and Land Records Department Report.

Reports of Land Records Departments for Bombay, Burma, Bengal, United Provinces, and Punjab.

Report on Settlement Operations, Punjab.

Reports on Survey and Settlement Operations, Bengal, Bihar and Orissa and Assam.

Reports on Operations of the Land Records and Settlement Departments, Central Provinces and Berar.

Report of the Talukdari Settlement Officer, Bombay.

Provincial Reports on the Administration of Estates under the Court of Wards.

Report on the Punjab Canal Colonies.

Separate Revenue (Salt, Excise, etc.).

Salt Department Reports: Northern India, Madras, Bombay, Sind, Bengal, Burma, Bihar and Orissa.

Excise Report for each Province.

Report on the Operations of the Opium Department.

Stamp Department Report for each Province.

Registration Department Report for each Province.

Income Tax Report for each Province.

Agriculture and Veterinary.

Report on the Progress of Agriculture in India.

Report of the Agricultural Research Institute and College, Pusa.

Bulletins of the Agricultural Research Institute, Pusa, and of the Provincial Departments of Agriculture.

Memoirs of the Department of Agriculture.

Proceedings of the Board of Agriculture.

Agricultural Journal of India (quarterly).

Reports of the Department of Agriculture for each Province.

Reports on Agricultural Stations, Experimental Farms, and Botanic Gardens for each Province.

Season and Crop Report for each Province.

Agricultural Statistics of India.

Area and Yield of certain Principal Crops.

Report on Production of Tea in India.

Report on Tea Culture in Assam.

Reports of the Civil Veterinary Department for each Province.

Statistics compiled from the Reports of the Provincial Civil Veterinary Departments.

Report of the Camel Specialist.

Report of the Imperial Bacteriologist (Veterinary).

Co-operative Societies.

Statements showing Progress of the Co-operative Movement in India.

Reports on Co-operative Societies for each Province.

Reports of Conferences of Registrars of Co-operative Societies, India and Provincial.

Forests.

Annual Return of Statistics relating to Forest Administration in British India.

Report on Forest Administration for each Province.

Reports of the Forest Research Institute and the Imperial Forest College, Dehra Dun.

Quinquennial Forest Review.

Indian Forest Memoirs.

Indian Forest Records.

Forest Bulletins.

Mineral Production and Inspection of Mines.

Review of Mineral Production (in Records of Geological Survey).

Report on Production and Consumption of Coal in India.

Report of the Chief Inspector of Mines.

Trade and Manufactures.

Annual Statements of Sea-borne Trade and Navigation, India and Provincial (Madras, Bombay, Sind, Bengal, Bihar and Orissa, Burma).

Review of the Trade of India (Parliamentary Paper).

Tables of the Trade of India (Parliamentary Paper).

Provincial Reports on Maritime Trade and Customs (including working of Merchandise Marks Act) for Bengal, Bihar and Orissa, Bombay, Sind, Madras, and Burma.

Accounts relating to the Sea-borne Trade and Navigation of British India (monthly and for calendar year).

Accounts relating to the Trade by Land of British India with Foreign Countries (monthly).

Annual Statement of Coasting Trade of British India.

Report on the Trade and Navigation of Aden.

Accounts of Trade carried by Rail and River in India.

Report on Inland, Rail-borne, or Rail-and-River-borne Trade for each Province.

External Land Trade Reports for Bengal, Bihar and Orissa, Assam, Burma, United Provinces, Punjab, North-West Frontier Province, Sind and British Baluchistan.

Indian Trade Journal (weekly).

Statistics relating to Joint-Stock Companies in British India and Mysore.

Report on the working of the Indian Companies Act for each Province.

Report on the working of the Indian Factories Act for each Province.

Report of the Chief Inspector of Explosives.

Public Works.

Administration Report on Railways.
Reports on Public Works (Buildings and Roads) for Madras, Bombay, Punjab, North-West Frontier Province, and Burma.
Review of Irrigation.
Report on Irrigation Revenue for each Province (except Madras).
Administrative Reports on Irrigation, Madras and Bombay.
Report on Architectural Work in India.

Posts and Telegraphs.

Report on the Posts and Telegraphs of India.
Report of Indo-European Telegraph Department.

Scientific Departments.

Report on the Operations of the Survey of India.
Records of the Survey of India.
Records and Memoirs of the Geological Survey of India.
Report of the Indian Meteorological Department.
Indian Weather Review, Annual Summary.
Rainfall Data of India.
Memoirs of the Indian Meteorological Department.
Report of the Meteorologist, Calcutta.
Report of the Director-General of Observatories.
Memoirs and Bulletins of the Kodaikanal Observatory.
Report of the Board of Scientific Advice.
Report of the Archæological Survey of India, and Provincial Reports.
Report and Records of the Botanical Survey.

Education.

Education Reports for India and each Province.
Quinquennial Review of Education (Parliamentary Paper).

Local Self-Government.

Reports on Municipalities for each Province and for Calcutta, Bombay City, Madras City, and Rangoon.
Reports on District and Local Boards or Local Funds for each Province.
Reports of Port Trusts of Calcutta, Bombay, Madras, Rangoon, Karachi, and Aden.

Medical, Sanitary, and Vital Statistics.

Report of the Sanitary Commissioner with the Government of India.
Report on Sanitary Measures in India (Parliamentary Paper).
Report of the Sanitary Commissioner for each Province.
Vaccination Report for each Province.
Report on Civil Hospitals and Dispensaries for each Province.
Report on Lunatic Asylums for each Province.

Report of the Chemical Examiner and Bacteriologist for each Province.
Scientific Memoirs by Officers of the Medical and Sanitary Departments.
Reports of the All-India Sanitary Conferences.
Reports of the Imperial Malaria Conferences.
Indian Journal of Medical Research (Quarterly).

Emigration and Immigration.

Calcutta Port Emigration Report.
Bengal Inland Emigration Report.
Assam Immigration Report.

Prices and Wages.

Prices and Wages in India.
Variations in Indian Price Levels.
Reports of Provincial Wage Censuses.

APPENDIX II.

EXTRACT FROM STATEMENT BY HIS EXCELLENCY THE VICEROY ON THE INDIAN STATUTORY COMMISSION.

When the Commission has reported and its report has been examined by the Government of India and His Majesty's Government, it will be the duty of the latter to present proposals to Parliament. But it is not the intention of His Majesty's Government to ask Parliament to adopt these proposals without first giving a full opportunity for Indian opinion of different schools to contribute its view upon them.

And to this end it is intended to invite Parliament to refer these proposals for consideration by a Joint Committee of both Houses, and to facilitate the presentation to that Committee both of the view of the Indian Central Legislature by delegations who will be invited to attend and confer with the Joint Committee, and also of the views of any other bodies whom the Joint Parliamentary Committee may desire to consult.

In the opinion of His Majesty's Government the procedure contemplated fulfils to a very great extent the requisites outlined above.

Such a Commission, drawn from men of every British political party and presided over by one whose public position is due to outstanding ability and character, will evidently bring fresh, trained, and unaffected judgment to bear upon an immensely complex constitutional issue.

Moreover, the findings of some of its own members can count in advance upon a favourable reception at the hands of Parliament, which will recognise them to speak from a common platform of thought, and to be applying standards of judgment which Parliament will feel instinctively to be its own. For myself I cannot doubt that the quickest and surest path of those who desire Indian progress is by the persuasion of Parliament, and that they can do this more certainly through members of both Houses of Parliament than in any other way. The Indian nationalist has gained much if he can convince Members of Parliament on the spot, and I would therefore go further and say that if those who speak for India have confidence in the case which they advance on her behalf, they ought to welcome such an opportunity being afforded to as many members of the British Legislature as may be thus to come into contact with the realities of Indian life and politics.

Furthermore, while it is for these reasons of undoubted advantage to all who desire an extension of the Reforms that their case should be heard in the first instance by those who can command the unquestioned confidence of Parliament, I am sanguine enough to suppose that the method chosen by His Majesty's Government will also assure to Indians a better opportunity than they could have enjoyed in any other way of influencing the passage of these great events. For not only will they, through representatives of the Indian Legislatures, be enabled to express themselves freely to the Commission itself, but it will also be within their power to challenge in detail or principle any of the proposals made by His Majesty's Government before the Joint Select Committee of Parliament, and to advocate their own solu-

tions. It should be observed moreover that at this stage Parliament will not have been asked to express any opinion on particular proposals and therefore, so far as Parliament is concerned, the whole field will still be open.

IRWIN,

Viceroy and Governor General.

The 8th November, 1927.

APPENDIX III.

SUMMARY OF RECOMMENDATIONS.

MAIN REPORT.

Report of the Commission on closer union of the Dependencies in Eastern and Central Africa.

Part I.

CONSTITUTIONAL CHANGES.

A.—PRELIMINARY STEP (to be taken immediately).

A High Commissioner should be appointed for Kenya, Uganda and Tanganyika with executive powers, his special functions being:—

(*a*) To inaugurate enquiries and joint discussions on questions of native policy as indicated in the annexure to Chapter VI, Part I.

(*b*) To promote unified control of certain services of common interest, and to settle on a fair basis any immediate causes of dispute or difference.

(*c*) To discuss locally and work out the arrangements for introducing the modifications proposed in the constitution of Kenya.

B.—FIRST STAGE OF DEFINITE PLAN.

The results of the preliminary enquiries carried out by the High Commissioner should be reviewed by His Majesty's Government, and if then thought fit the post of Governor General of Eastern Africa should be created in place of the appointment of High Commissioner. The Governor General is to be a link between the Secretary of State and the local Governments, and for this purpose the plan includes changes of organization both in Africa and in London.

Organization in Africa.

1. The Governor General should exercise so far as these can be delegated to him the functions of supervision and control now exercised through the Secretary of State, and should be endowed for this purpose with executive powers and with control over legislation, but these powers and control should be exercised only for certain purposes which would be conveyed to him in his instructions.

2. The principal duties of the Governor General will be:—

(*a*) To secure Imperial interests and the proper discharge of the responsibilities of His Majesty's Government.

(*b*) To hold the scales of justice even between the various racial communities.

(*c*) To co-ordinate services of common interest.

(The most important duty of the Governor General under heads (*a*) and (*b*) above will be to "direct the course of native policy and to supervise its working.")

3. The Governor General should work with the following bodies:—

(*a*) For general purposes.

A small Advisory Council comprising officials and non-officials of all three Dependencies.

(*b*) For services of common interest.

(*i*) *Transport.*—An inter-Colonial Advisory Railway Council for the three Dependencies organised on the same lines as the existing Railway Council of Kenya and Uganda.

(*ii*) *Customs.*—An inter-Colonial Customs Council organized on the same lines as the Railway Council.

4. During the preliminary period and the first stage the status of the three Governors is to be affected as little as possible. They should retain the title of Governor and their present rates of pay, and should continue to be for all practical purposes the King's representatives in their own territories.

Organization in London.

5. The Secretary of State should have available:—

(*a*) For consultation on matters of policy in Eastern Africa (including Zanzibar) and Central Africa—a small Advisory Council. The membership of this Council should be from five to eight and the members should be paid.

(*b*) A Finance Committee and a Transport Committee, or possibly a joint Finance and Transport Committee, of which the Financial Adviser to the Secretary of State and the Transport Adviser (if any) would be members. The Chairman (or Chairmen) of these Committees should sit on the General Advisory Council.

6. To assist in the further consideration of policy periodical Conferences for the Dependencies in Eastern and Central Africa should be held in London and should be attended by official and unofficial delegates.

7. For the information of Parliament on the course of affairs in Eastern and Central Africa Annual Reports should be prepared by the Governor General, and by the Governors of Nyasaland and Northern Rhodesia, and published as a Parliamentary Paper with the comments of the East African Council.

C.—The Legislative Councils of Kenya, Uganda, and Tanganyika.

1. No changes are needed at present in the Legislative Councils of Uganda and Tanganyika.

2. Simultaneously with, or subsequent to, the creation of the post of Governor General, the following change should be introduced in the composition of the Legislative Council of Kenya (see Chapter VIII):—

Four of the official members of the Legislative Council should be replaced by four unofficial members nominated to represent native interests (in addition to the missionary already appointed for this purpose).

3. No further change is recommended at present in the composition of the Legislative Council of Kenya, but it is contemplated that at later stages there will be a progressive increase in the representation of native interests, and a progressive diminution in the proportion of official members.

4. Consideration should be given to the replacement of adult franchise in Kenya by a franchise depending on a civilization qualification. The nature of the tests to be imposed should be a matter for enquiry by the High Commissioner in discussion with the Government of Kenya and representatives of the unofficial communities.

5. The changes which the new franchise qualifications would effect in the respective members of European and Indian voters should be made clear to the leaders of both communities, and the High Commissioner should endeavour to induce them to come to an agreement on the question of election on a common roll.

6. Concurrently with the changes proposed in the composition of the Legislative Council of Kenya the Governor General should be given special power to enact legislation and to secure supplies which he regards as essential for the discharge of his responsibilities, contrary to the vote of the majority of that Council.

D.—Local Government.

Institutions of local and municipal government should be vigorously developed both in settled and native areas.

E.—Future Developments.

The working of the whole of the arrangements set out above should be reviewed after a period to be fixed in due course by the Secretary of State.

It is contemplated that the exercise of central direction by a Governor General will lead to the establishment of a Central Council with power to legislate in respect of services of common interest, and with a central revenue (see Chapter XI).

Part II.

POLICY AND ADMINISTRATION.

A.—Native Policy.

1. The field of native interests in Eastern and Central Africa should be clearly defined not only in the interests of the natives but also with a view to making clear the scope for the development of the immigrant communities. In Kenya, Uganda, and Tanganyika a programme of native policy for all three Dependencies should be worked out and co-ordinated after full local discussion.

2. Essential native interests under the following headings must be defined and protected:—

Land.
Economic development, Government services and taxation.
Labour.
Education.
Administrative and Political Institutions.

3. The Governments of the Eastern and Central African Dependencies should endeavour to secure such a measure of segregation as will facilitate the creation of homogeneous native and non-native areas of sufficient size to become units of local self-government.

4. Native tribal institutions should be fostered and native administrations should have their own courts.

5. Native opinon should be consulted regarding legislation affecting their interests through native administrations or District Councils.

6. With a view to forming as close an estimate as possible of the production of native areas, typical areas should from time to time be selected for a test census of production.

7. In the annual report of each of the Eastern and Central African territories, a section should be included on native interests giving data similar to those required by the Mandates Commission of the League of Nations in the annual reports of mandated territories.

8. For the purpose of studying all factors affecting the moral and material progress of the natives, a Central Bureau of Statistics should be attached to the Governor General, and administrative officers should be instructed in methods of observation and record.

B.—Special Arrangements in Kenya.

1. Representation of native interests in Kenya should be supplemented by the following measures:—

(*i*) Consultation of native opinion in regard to legislation through District Councils and periodical durbars.

(*ii*) Supply of full information on native affairs to the representatives of native interests in the Legislative Council.

(*iii*) Appointment of an Advisory Committee on Native Affairs to assist the Chief Native Commissioner.

(*iv*) Appointment of representatives of native interests on all official bodies which can influence policy.

2. Advisory Committees should be attached to some of the departments of administration.

C.—Transport and Communications.

1. Subject to full local discussion and inquiry the management of the Tanga-Moshi-Arusha Railway system and possibly that of the Port of Tanga should be transferred to the Kenya-Uganda Railways Department.

2. The Central Authority should settle outstanding railway rates questions, in particular the question arising out of the extension of the Tanganyika railway to Mwanza.

3. Standardization of equipment on the Kenya-Uganda and Tanganyika Railway systems should be introduced as soon as possible.

4. The financial position and prospects of the Kenya-Uganda and Tanganyika Railway systems should be examined with a view to making arrangements for joint working.

5. Machinery should be provided for continuous preparatory study of railway projects.

6. Special surveys should be organized in Tanganyika in order to provide information for framing land settlement and railway policy.

The cost of the surveys should be regarded as a proper subject for loan expenditure.

7. On the completion of these surveys the following main trunk connections should be considered:—

Northern connection.—Either Dodoma-Arusha or Kilosa-Mombo.

Southern connection.—Either Dodoma-Fife or Kilosa-Ifakara-Manda.

8. In considering new railway construction the Government of Tanganyika should give preference to branch lines which could later become part of one or other of the main trunk connections referred to under recommendation 7 above.

9. Pending consideration of the possibility of constructing railways, the following trunk roads are recommended:—

(*a*) A road from Dodoma through Iringa to the Tukuyu Highlands of Tanganyika.

(*b*) A road through the coastal areas of Kenya and Tanganyika uniting Mombasa, Tanga, and Dar-es-Salaam.

D.—Research.

1. The High Commissioner should appoint a special technical Commission on Research to survey the existing organizations and to report on the main objectives to be pursued.

2. The Eastern and Central African Dependencies should be treated as a unit in any Imperial organization of scientific research.

3. Each territory must retain adequate research institutions of its own to undertake the scientific work required for the local purposes of its Medical, Veterinary, Agricultural, and other Departments.

E.—Defence.

The High Commissioner should consider the question of a more efficient and economic organization and distribution of the King's African Rifles, and similar questions, in consultation with the Governors of the three territories and the Inspector-General of the King's African Rifles.

F.—Administrative Services and Secretariat.

1. Trial should be made in the Eastern and Central African Dependencies of the system of limiting the tenure of appointments in the Secretariat to a comparatively short term of years, and there should be more frequent interchange between officers serving in the Secretariat and in the Administrative Service.

2. As far as possible the highest posts in Eastern and Central Africa, that is to say, the posts of Colonial Secretary, etc., should be filled from the ranks of officials in these territories.

G.—Location and Staff of Central Authority.

1. Government House at Mombasa should be put at the disposal of the High Commissioner, and the location of permanent head-quarters for the Governor General should be a matter for enquiry and discussion by the High Commissioner.

2. The Secretariat of the East African Governors' Conference should be attached to the High Commissioner, and later to the Governor General. Apart from this their staff should be confined to Secretaries.

3. The salaries of the High Commissioner and Governor General and their personal staffs (but not their local travelling expenses) should be met by His Majesty's Government. The cost of the Secretariat of the Governors' Conference and any other expenditure involved in our recommendations should be borne by the Governments concerned.

4. The High Commissioner should pay frequent visits, and the Governor General regular annual visits, to England, and when they leave Eastern Africa they should retain their official positions and no substitutes should be appointed.

H.—The East African Governors' Conference.

The East African Governors' Conference should be continued for Kenya, Uganda, and Tanganyika, but the High Commissioner (and later the Governor General) should preside over it, and should be endowed with full powers to take decisions and to issue orders for their execution.

(See also later recommendations regarding the representation of Zanzibar and the Central African territories.)

Part III.

RECOMMENDATIONS REGARDING ZANZIBAR.

1. The existing co-operation of Zanzibar with the mainland territories to advance common interests should be maintained and extended particularly in such matters as scientific research, administration, harbours and docks, migration of labour, quarantine regulations, and assimilation of the forms of legislation.

2. Zanzibar should continue to be represented on the East African Governors' Conference.

SUMMARY OF THE CHAIRMAN'S ADDITIONAL RECOMMENDATIONS.

The Legislative Council of Kenya.

1. As an alternative to the proposal contained in Recommendation C. 2 on page 290, the following proposal is recommended and should be discussed by the High Commissioner with the local communities in Kenya:—

(*a*) The number of the Official Members of the Legislative Council should be reduced from nineteen to nine, and the number of additional Nominated Unofficial Members recommended in Chapter VIII, page 187, should be increased from four to seven.

(*b*) Of the eight Nominated Unofficial Members three should be nominated to represent the interests of the whole community and one of these three should be a member of the Indian community. The remaining five should represent the interests of the natives.

2. Should it be found necessary to increase the number of European constituencies, that number should in the first place be increased from eleven to thirteen, the number of Official Members being increased from nine to ten and the number of Elected Indians from five to six.

3. The appointment of one of the Unofficial Members as an executive Minister should be contemplated forthwith by way of an experiment.

SUMMARY OF CHAIRMAN'S REPORT ON THE CENTRAL AFRICAN TERRITORIES.

A. The Governor of Southern Rhodesia should be appointed High Commissioner for Northern Rhodesia and Nyasaland with powers similar to those proposed for the Governor General of the North-Eastern territories, in order to supervise and co-ordinate—

(*a*) Imperial outlook;
(*b*) Native policy;
(*c*) Services of common interest.

He should have authority to arrange for joint conferences of the several legislatures.

B. Such union, through an executive Central Authority, should be encouraged to develop into a closer union with a central revenue and a joint legislative council to deal with services of common interest such as defence, research, customs and communications.

C. Ultimate redistribution of boundaries is desirable as follows:—

1. The settled Central or "railway" area of Northern Rhodesia to be united with Southern Rhodesia.
2. North-Eastern Rhodesia to be united with Nyasaland (without prejudice to the question of transferring later the area south of Lake Tanganyika to Tanganyika).
3. The maintenance of Barotseland as an inalienable native reserve under the Government of Southern Rhodesia.

The above redistribution should be considered at a representative conference with the Governor of Southern Rhodesia (as High Commissioner of the Central Territories) as Chairman.

D. The co-ordination of services and interests with the North-Eastern Territories should be maintained by local conference between the heads of the two administrations as well as through the Colonial Office.

SUMMARY OF THE MAJORITY REPORT ON THE CENTRAL AFRICAN TERRITORIES.

1. The independent status of the Governments of Nyasaland and Northern Rhodesia should be maintained pending further development of communications and of mineral exploitation in Northern Rhodesia, both of which may have an important bearing on the settlement of administrative boundaries.

2. In the meanwhile the following measures are recommended:—

(*a*) The High Commissioner or Governor General of Eastern Africa should be the Secretary of State's chief adviser on important matters of policy affecting Nyasaland and Northern Rhodesia.

(*b*) The Governor General should pay occasional visits to Nyasaland and Northern Rhodesia in an advisory capacity. He should not have any executive authority over the Governors.

(*c*) The Governors of these two Protectorates should continue to attend the Governors' Conference. The Government of Southern Rhodesia should be invited to send a representative to the Conference.

(*d*) Enquiries into matters of native policy and white settlement on the lines indicated in the annexure to Chapter VI, Part I, should be carried out in Nyasaland and Northern Rhodesia in consultation with the Governor General of Eastern Africa.

(*e*) Nyasaland and Northern Rhodesia should be included in the same group as the Eastern African Dependencies for purposes of research.

(*f*) An official majority should be maintained in the Legislative Councils of both Protectorates, but there is no objection to a moderate increase in the unofficial representation by nomination, in the case of Nyasaland, and by raising the number of Elected Members in the case of Northern Rhodesia.

(*g*) Institutions for local government both in the settled areas and among the natives in Nysaland and Northern Rhodesia should be developed as vigorously as possible.

(*h*) An attempt should be made in Nyasaland to build up responsible native administrations and native authorities, and it might be advantageous that an experienced officer should be lent to Nyasaland by the Government of Tanganyika to assist in the necessary enquiries.

APPENDIX IV.

SKEEN MEMORANDUM ON THE MILITARY SITUATION IN INDIA.

120. **Mr. C. S. Ranga Iyer:* (*a*) Has the attention of the Government been drawn to statements in a section of the Press to the "Skeen Memorandum" on the military situation in India, and the Indian army's military preparedness or unpreparedness for war on modern lines?

(*b*) Will the Government be pleased to publish the "Skeen Memorandum" on modernizing the Indian Army?

Mr. G. M. Young: With your permission, Sir, I propose to answer questions Nos. 120, 121, 122 and 176, also Mr. Gaya Prasad Singh's question No. 158, and Colonel Crawford's question No. 178 together, and to take this opportunity of making a statement on the matters raised in these questions. I am afraid the statement will be rather a long one; but I hope that the House will allow me to trespass a little on its patience, as it would be difficult to return a complete answer to these questions in a few words.

The document referred to in the questions was a lecture given by a General Staff Officer, at the four Command Headquarters, on army finance and economy within the army. The main object of the lecture, and of its subsequent circulation, was to stimulate a special campaign of economy which has been initiated throughout the various formations of the army. In order to assist in this object, mention was made of existing deficiencies in equipment, and of the estimated sums required to overtake those deficiencies during the next few years. The essence of this economy campaign within the army is to encourage the military authorities all through the army to look for and suggest methods of economizing on their own initiative, and so to assist the Government in providing the funds required to meet the army's growing needs, without increasing military expenditure beyond its present limits. The agreement referred to in Mr. Gaya Prasad Singh's question is an informal arrangement, under which savings effected by the military authorities as a result of this special economy campaign, may be appropriated towards the equipment programme.

The lecture is a confidential document designed for official use only, and Government are not prepared to publish the whole document *in extenso* merely because a copy has been purloined by somebody, and parts have already appeared in the Press. I will, however, endeavour to give Honourable Members full information on the various points.

The programme or scheme of His Excellency the Commander-in-Chief, mentioned in the questions, is merely a part of the continuous policy of Government, during the incumbency of the present and the late Commanders-in-Chief, in regard to modernizing the equipment of the army in India and making good certain shortages which resulted from acceptance of the recommendations of the Indian Retrenchment Committee. There is no separate scheme for modernization in the army. Modernization is proceeding continuously from day to day. His Excellency the Commander-in-Chief made this clear in his budget speech last March when he was informing the House about the progress of mechanization—a word which is practically synonymous with modernization in this context. The army of the United Kingdom has for the last few years been making continuous experiments with different

patterns of mechanical transport machines. The army in India carefully follows the experiments made in England, testing the results, and modifying them, where modification is necessary, to suit Indian requirements. The task of keeping pace in the modernization of equipment with the progress made at home has been made more difficult in the past few years owing to the acceptance by Government of the recommendations of the Indian Retrenchment Committee. When Government accepted those recommendations, it was recognized, and stated, by Lord Rawlinson that the economies then made in equipment would have to be counterbalanced sooner or later by further expenditure in order to keep pace with the requirements of defence. In fact, in giving their support to the proposals of the Inchcape Committee, the Government of India took a definite risk, in recognition of the then paramount need for retrenchment, by decelerating to some extent, the rates of provision and renewal of part of the army's equipment. It was realized from the beginning, however, that this state of affairs could not continue beyond a certain point. The matter was kept under constant observation, and by 1926 we had reached the point when we could no longer go slow, but, on the contrary, had to begin catching up again. By the end of 1927, we could see our way clear. Much progress had been made in redeeming what I may call the Inchcape shortages, and we could predict with some confidence that those shortages would be soon obliterated altogether without our having to add appreciably to our military estimates. But meanwhile we were confronted with new problems arising out of the rapid developments in modernization, and, in particular, the mechanization of foreign armies and of the army of Great Britain. It was to keep pace with these further developments also, if possible, without increasing our present scale of military expenditure, that the economy campaign to which I have referred was devised in the cold weather of 1927-28. At the same time there was no hope of reducing that expenditure below its present level. That is why His Excellency the Commander-in-Chief and the late Finance Member have informed Honourable Members on more than one occasion, that they saw no prospect in the immediate future of a further reduction in the army estimates, but that, on the other hand, there was a possibility that those estimates might be increased. This was the position, Sir, when my Honourable friend, Colonel Crawford, asked me last March, whether the equipment of the army was in a satisfactory position, particularly in respect of mobility and defence against an attack from the air accompanied by the use of gas. These questions were put towards the close of the debate on the Army Department grant, when there was, of course, no opportunity for preparing a detailed statement. In replying, while I informed the House that Government were doing all they could towards ensuring that, when the time came, our army would go into the field fully equipped, I declined to make any admission of insufficiency in particular items of equipment. To that reply I adhere, and if a similar question were again put to me in the course of a debate, I should give a similar answer. But in the meanwhile there has been the public controversy on the subject, to which Honourable Members have drawn attention, and many incorrect statements about the condition of army equipment have appeared in the Press. In view of this circumstance, and as our equipment programme is now still further advanced than it was in March, I have had prepared a memorandum which explains

as fully as possible, from the technical point of view, what we have been doing in the last few years, where we stand now, and what we propose to do in the near future. I lay this memorandum on the table of the House. It goes considerably into details, and I think it will supply Honourable Members with all the information that they require. But if, after reading it, they find that there are other technical points on which they would like to be informed, I shall be very glad to give them what information I can.

MEMORANDUM.

The policy followed by the Army in matters of organization and equipment is concisely stated in a resolution of the Legislative Assembly in 1921 in connection with the Esher Committee's recommendations, which runs as follows:—

> "That the purpose of the army in India must be the defence of India against external aggression and the maintenance of internal peace and tranquillity. To the extent that it is necessary for India to maintain an army for these purposes, its organization, equipment and administration should be thoroughly up to date and, with due regard to Indian conditions in accordance with the present day standards of efficiency in the British army, so that when the Army in India has to co-operate with the British Army on any occasion there may be no dissimilarities of organization which would render such co-operation difficult."

This policy means the replacement of the older classes of artillery equipment, aircraft, transport, etc., by more modern types. The main feature of it is the substitution of mechanical for animal transport wherever possible.

ARMY TRANSPORT in war consists of:

(*a*) FIRST LINE TRANSPORT, which carries with the troops what they require in actual battle. Animal transport is used for this because the fighting line cannot have any transport which is unable to cross any country where men and horses can go; but, where M. T. can be used (as in the case of certain technical units) there M. T. will be substituted for animal transport.

(*b*) Next, THE TRAINS which carry daily replenishment. These are at present mainly A. T. carts, but there are some horsed wagons. Both can only move a short distance at a comparatively slow rate. The results are that the length of columns in the line of march is inordinately long whilst the ability to operate away from the Line of Communication road or rail transport behind is restricted to a small distance. The sole advantage provided by A. T. over M. T. has been a superior power of operating off a good road. Fortunately we have now in sight mechanical transport on the 6-wheeler principle, which in most cases has been proved to be as good across-country as the A. T. cart. As this M. T. is more powerful, economical and speedy (all combining to improve mobility) the A. T. cart is now to be displaced from the role which it has so honourably filled for years and will to a considerable extent disappear—except in cases where the use of an M. T. vehicle would be uneconomical. The gradual replace-

ment of these carts is high in the Army programme, but pack transport has still to be retained for use in country where neither M. T. nor A. T. carts can be employed. Thus the amount of animal transport retained will be cut down to a minimum, the principle followed being rather to organise for a more serious campaign and to improvise for a minor one, than *vice versâ*.

(*c*) Lastly, Army Transport includes transport required for MAINTENANCE, *i.e.*, to connect railhead with the trains which have been mentioned previously, and here in all large operations the employment of M. T. beyond railhead is obligatory.

A few remarks on the general policy of replacing animals by M. T. may be of interest.

It is financially impossible to maintain in peace all the M. T. required in war. Vehicles which cannot be used economically in peace tend to get out of date, with consequent complications in the supply of spare parts, and eventually have to be scrapped long before their useful mileage has been completed. The principle therefore adopted in all armies is to utilise the form of transport obtainable from civilian sources on some form of subsidy basis, the advantages of which system need no explanation. It is the displacement of the horse by M. T. in civil life which, quite as much as the advantages to be gained in war, has been the driving force behind the increasing mechanization of the Army at Home.

In India repeated efforts have in the past been made to obtain M. T. by this means, but have proved abortive because the development of M. T. in India for civil needs was not sufficiently advanced. The last few years has, however, seen a remarkable expansion in M. T. of all descriptions all over the country, which encourages us to hope that the time is now ripe for a renewed effort to obtain a part of our requirements on a subsidy basis.

In particular we hope to get the country to use 6-wheelers and are offering encouragement by a system of subsidy which has recently been published throughout India. The more this subsidy scheme takes on and the larger the reserve in useful civil life, the more can we depend on this reserve for war and therefore the less the number of vehicles we have to hold uneconomically in Army reserve. A large number of enquiries in connection with such subsidies has already been received.

The replacement of animal transport by M. T. will cause the former to diminish. There is little prospect of this change causing any large immediate saving in peace. In war, however, the resultant economy and efficiency are beyond computation. The three results are, therefore, (1) greatly increased mobility in war, (2) slight economy in peace, (3) great economy in war. The pace at which His Excellency the Commander-in-Chief introduces these measures will only be conditioned by the funds available and the success of the subsidy scheme. So far it is merely a matter of simple substitution (as funds permit) of M. T. for the animal transport on which we have relied in the past.

4. Before proceeding to describe the other directions in which mechanization is proceeding, it is desirable to make a disgression. Frequent criticism may be read of India's failure to follow Home models in these matters. Great as are the disadvantages of not doing so, yet, in this matter for the

present and until experiments at Home crystalize, we have to keep the following factors in front of us always:—

Firstly, India is not a highly industrialized country. She has not the power of producing war machines nor the reserves of men required both to man and keep them in the field. For the present, therefore, a commercial vehicle (if such will meet the needs we foresee) must be used.

Next, India's war problem by reason of geographical and climatic conditions has special aspects and requires special treatment. So far these factors do not necessarily favour the employment of the special machines which are being evolved to meet the problems facing the Home authorities. Eventually as communications improve and develop our own needs will tend more and more to call for the same equipment as the other Imperial Armies find essential, but for the moment mobility is our main requirement, and mobility in semi-developed country. Mobility is the main principle underlying all our projected reforms and we have to keep it in view always.

Now, if funds were unlimited, there would be less need for care. They are, however, rigidly restricted and therefore caution in any steps we take is obligatory. And this applies more particularly to the introduction of new equipment, until we are quite certain that it can be usefully employed in our particular conditions.

To illustrate this—Tanks have been tried. Two tanks now lie at Ahmednagar, requiring such heavy repair to put them on the road and promising such little result when repaired that their re-conditioning is indefinitely postponed. We believe, however, that a type will eventually be developed which will suit us, and when that day comes it would be folly not to take advantage of it.

5. Mechanization of Artillery. This principle has always been accepted as regards medium artillery. Tractors were hauling guns at the manœuvres and review at Delhi as far back as 1925. Before and since then we have been searching for an efficient gun-haulage vehicle. The "Dragon", a track vehicle, in fact the chassis of a Tank, is employed at Home; but these very powerful tractors are for our purposes unnecessarily powerful (and thus expensive) and the tank trials referred to have not been successful enough to warrant large expenditure on this type.

The Kegresse, a machine on the half-track principle, has been given full trial from 1924, but under our conditions definite draw-backs have appeared. In 1926 the six-wheeler came on the market and specimens were at once ordered and tried out; as a result, in 1927, exhaustive trials in carrying loads and gun haulage showed we had reached a stage when a start with "mechanization" could be safely made.

As regards Field Artillery, the fact that a start has been made in mechanization has appeared in most newspapers.

The Army see definite and material savings in upkeep and in the Remount Services; also, in war, the advantages, in cases where guns thus drawn can be used, more than justify the innovation, even were it to cost money.

6. The advantages of partial mechanization as applied to Transport and Artillery have been dealt with, but this by no means exhausts the subject.

Members will have read of the doings of the mechanized or "Armoured Force" at Home, as representing the last word in the conception of what is

required in a war of the future. Remarkable as these doings were, it must be remembered that the force is still in an experimental stage, and that finality has not yet been reached either in regard to types of machines or in regard to their tactical employment. While we in India agree with the general idea underlying this force, the differing conditions here may demand developments along somewhat different lines.

7. There are other matters which are engaging the attention of H. E. the Commander-in-Chief; experiments in the use and reliability of smoke for screening purposes under our conditions are proceeding; anti-aircraft defence and anti-gas measures are matters requiring careful thought, and both are receiving it whilst we are carefully watching experiments at Home in the provisions of means of defence against armoured fighting vehicles. Obviously, however, it is not in the public interest to be as precise in these as in the other matters. The situation as regards rifles and other small arms may now be considered satisfactory. Steps are being taken to keep the R. A. F. in India up to date for which sums provision is being made from Army savings with no net addition to the Budget.

8. It has been suggested by ill-informed persons that the Army in India is conservative, if not reactionary, and that it fails to keep pace with or to profit by developments at Home. The fact is that the conditions are entirely different. The Army at Home, with unlimited technical, scientific and industrial resources behind it is in the best possible position to carry out experiments of all kinds, the results of which are freely placed at our disposal. We are not similarly placed and consequently, whilst we watch the results of experiments at Home, and ourselves try out any new equipment resulting therefrom which may appear suitable to our needs, we have to be quite sure of our ground before we apply on a large scale the results of experiments which at Home have only been tried out or adopted on a comparatively small one.

Those who criticise any apparent slowness to move on our part, would be the first to condemn, and rightly condemn, the waste of money which would result from any change of policy, hastily thought out and put into effect, which might prove unsuitable to our particular conditions. As to its suitability or otherwise H. E. the Commander-in-Chief, who is in possession of all the factors in the problem, must be the arbiter. The existing arrangement by which the Army in India secures most valuable information from Home, without being forced to lower its own standard of preparedness to obtain it, is financially the most economical, and the most suitable to conditions at present existing. It is carried out in the closest consultation and in complete agreement between the responsible authorities here and at Home.

APPENDIX V.

STATEMENT FOR THE INDIAN STATUTORY COMMISSION BY THE NATIONAL ASSOCIATION FOR SUPPLYING MEDICAL AID BY WOMEN TO THE WOMEN OF INDIA (THE COUNTESS OF DUFFERIN'S FUND, INCLUDING THE WOMEN'S MEDICAL SERVICE).

In presenting this Memorandum to the Indian Statutory Commission the Council of the National Association for Supplying Medical Aid by Women to the Women of India endeavours to explain to the Commission how the Association's constitutional position, and in consequence its activities, have been affected by the Reforms introduced by the passing of the Government of India Act, 1919, and by the statutory rules made thereunder.

History and Objects of the Association.—The Association may be said to owe its existence to the direct initiative of Her Late Majesty Queen Victoria, who personally commended to the Countess of Dufferin on the eve of the latter's departure for India the consideration of the necessity for providing the women of India with medical treatment from doctors of their own sex. In 1885 Lady Dufferin issued an appeal throughout British India and the Indian States, with the result that by 1888 the Association was formed and registered under the Societies Registration Act, 1860. It had at that time an invested capital of a little over five and a half lakhs of rupees, bringing in an annual income of something over Rs. 30,000. This constituted "The Countess of Dufferin's Fund". At the same time branches were established in all the important provinces, each branch having complete control of the funds at its disposal. The method adopted in 1888 of distributing the funds raised was to vest in the Central Committee all monies contributed in England, by the Indian States and from the areas in British India under the direct control of the Government of India. Contributions from areas included in what are the present Governors' provinces were returned to them to form the corpus of the funds of the branches. For many years now no further addition to the central fund has been received by public subscription. The policy of the central organisation has been to leave a free field in this matter to the provinces, and all contributions have been credited to the funds of the branches in the provinces in which they were received. These of late years have not amounted to a very large sum. The corpus of the central fund has now, mainly through savings, grown to about seven lakhs of rupees, and the income available for distribution amounts to about Rs. 41,500. The wife of the Viceroy of India for the time being has always been the President of the fund.

The objects for which the National Association was established are:—

(1) Medical tuition, including the teaching and training in India of women as doctors, hospital assistants, nurses and midwives.

(2) Medical relief, including:—

(*a*) the establishment under female superintendence of dispensaries and cottage hospitals for the treatment of women and children;

(*b*) the opening of female wards under female superintendence in existing hospitals and dispensaries;

(c) the provision of female medical officers and attendants for existing female wards; and

(d) the founding of hospitals for women where special funds or endowments are forthcoming.

(3) The supply of trained female nurses and midwives for women and children in hospitals and private houses.

(4) The management of the Fund raised for the above objects, and which is known as " the Countess of Dufferin's Fund ".

(5) The purchase or acquisition on lease, or in exchange, or on hire or otherwise, of any real or personal property, and any rights or privileges necessary or convenient for the purposes of the Association.

(6) The erection, construction, alteration and maintenance of any buildings necessary or convenient for the purposes of the Association.

(7) The sale, improvement, management and development of all or any part of the property of the Association.

(8) The promotion and establishment of Branches and of other Societies or Associations with similar objects, and the affiliation or amalgamation of such Societies or Associations with this Association.

(9) The doing of all such things as are incidental or conducive to the attainment of the above objects or any of them.

In its early days the Association acted as an agency for bringing medical women out from England and finding them appointments in India. It also helped in the building of hospitals. After 1900 the Central Committee gave up the recruitment of medical women from England and left the Provincial Committees to make their own arrangements. For a time thereafter its activities consisted in the giving of grants-in-aid to Zenana hospitals and training schools for women, or scholarships and prizes to women medical students and of post-graduate scholarships to Indian and Anglo-Indian women doctors for courses of study in the United Kingdom. In the year 1914 the scope of its activities was altered by the formation of the Women's Medical Service for India.

Creation of the Women's Medical Service.—It is not necessary for the purposes of this Memorandum to trace in detail the various activities of the Association. During the Viceroyalty of the Earl of Minto, which began in 1905, the operations of the Dufferin Fund came in for much criticism from various quarters. It was alleged with some justice that there were too few qualified medical women, that their remuneration was inadequate and that they were not accorded a proper status in the districts where they were employed. These were matters for which the whole blame could not justly be ascribed to the Association. The Central Committee realising that, if it was to attract medical women of a sufficiently high standard, it must improve the conditions of their service in India, applied in 1908 to the Government of India for an annual grant of Rs. 50,000. Early in 1909 the Association was informed that the Secretary of State was unable to agree to the annual grant but had sanctioned, as a special case, for a period of five years, an annual grant to the Fund equal in amount to the income received in the preceding year by the Central Committee from subscriptions and donations, subject to

a maximum of Rs. 20,000. It was pointed out that the Central Committee's income in 1907 was only Rs. 2,500 from these sources, but nevertheless for the purpose of calculating the grant the Secretary of State decided that the subscriptions and donations received by the provincial committees and branches should not be taken into account. The result therefore was that the financial position of the Association remained very much where it was. From 1910 attempts were made to induce the Government of India to sanction the formation of a Women's Medical Service under the Government on the lines of the Indian Medical Service. In 1913 the Government of India finally rejected this proposal but sanctioned an annual subsidy of Rs. 1,50,000 to enable the Women's Medical Service to be carried on by the Countess of Dufferin's Fund. The service was inaugurated from the 1st January, 1914. The amount of the subsidy was eventually increased in 1919 to Rs. 3,70,000. In December, 1921, the Government of India informed the Association that this must be regarded as a final figure, and that it would of course be subject to the vote of the Legislative Assembly, and they added "the Government of India do not intend to concern themselves further with the question of pay or strength of the Women's Medical Service, and the Association will have to make their own arrangements for meeting increased pay within that sum, by reducing numbers, securing money from other sources, or otherwise". This was the first indication of the effect that the Reforms of 1919 would have upon the Women's Medical Service. It was pointed out to the Association that although it received a large subsidy from central funds, it was supplying women doctors to Local Fund hospitals, hospitals in Indian States and even purely provincial hospitals which, under the Reforms, should not be subsidised from central revenues. In 1924 the Auditor General raised the question of the constitutional propriety of the Government of India making its grant without conditions, and after the Association had been called upon to justify its demand for the grant from central revenues, the Association was informed early in 1925 that the Secretary of State had sanctioned the continuance of the grant of Rs. 3,70,000 subject to the vote of the Legislative Assembly, and subject also to the condition that in future no officers of the Women's Medical Service should be lent to local Governments except in return for full payment of salary, including contributions to provident fund. From that time the Association took steps to ensure that the conditions then imposed should be strictly enforced in all future cases.

Present financial position of the Women's Medical Service.—Though the Government of India subsidy has remained fixed since 1919 the financial position of the Association in regard to the Women's Medical Service has deteriorated. In the interval, as a result of the recommendations made by the Commission known as the Lee Commission, various concessions have been made to most, if not all, of the Government services, and the Association felt that there was an obligation on them to treat its own officers in the Women's Medical Service with something like the same generosity. In consequence salaries have been increased, passage concessions have been granted and more liberal provident fund has been inaugurated. It is to be remembered that officers of the Women's Medical Service earn no pension. The result has been that the average cost of maintaining a single officer in the Women's Medical Service is now considerably greater than it was when the Government

of India fixed its subsidy of Rs. 3,70,000. The cost may now roughly be taken at Rs. 10,000 per annum. Early in 1926 the Association was advised by Sir Frederic Gauntlett, its Honorary Treasurer, that the cadre of the Women's Medical Service should not exceed 42 members, allowing for the filling of 36 posts, with a leave reserve of 14 per cent. as against 20 per cent. in some of the Government services. The accuracy of this forecast was substantiated in 1927 when the employment of a cadre of 44 resulted in a deficit in the year's working. The Association cannot now maintain more than 42 members of the Women's Medical Service though it feels very strongly that a much larger number could be utilised.

It may be mentioned that of the present service 50 per cent. are of Indian domicile recruited in India.

The Central Committee in 1927 found themselves in the position of having to report to the Council of the Association that a reduction in the cadre of the Service was inevitable unless the income of the Association could be increased. The implications of this decision were that not only would officers of the Service have to be withdrawn from hospitals which had been under their charge for some time, but also requests from provincial committees for officers to take charge of new women's hospitals which had been inaugurated by them in full confidence that the Association would be able to lend the services of a fully qualified lady doctor, would have to be refused. When these implications were explained to the meeting of the Council which took place under the presidency of Her Excellency the Lady Irwin on March 19th, 1927, it was unanimously resolved that the financial position of the Association in regard to the Women's Medical Service should be laid before the Government of India, and that the Government should be asked to increase its annual subsidy to Rs. 5,00,000. The reply of the Government of India to the appeal addressed to it in consequence of this resolution was received in October, 1927. In rejecting the Association's request the Government of India reminded the Association that the grant of Rs. 3,70,000 was sanctioned in 1921 subject to the clear understanding that the Government of India did not intend to concern themselves further with the question of the pay or the strength of the Women's Medical Service. They added that they were of opinion " that while the present constitution lasts it would not be proper for them to throw any further burden on central revenues for an extension of activities which would primarily benefit the provinces, and should therefore be paid for by the provinces ", and they suggested that if the Association wished to proceed with the proposals outlined in the letter under reply they should make an appeal to local Governments or to the general public.

The National Association is not in a position to question the Government of India's interpretation of the constitutional position. Their object in addressing the Indian Statutory Commission is to emphasise that the matter is one in which the Government of India has great responsibilities, and that a constitution which prevents them from assuming those responsibilities should be amended. It is not possible for the Association by adopting the Government of India's suggestion to raise any useful amount by an appeal to the generosity of the general public. Nor indeed does the Association feel that it is dealing with a matter which should be the subject of private generosity. An appeal has, however, been directed to local Governments, some of whom

have promised to lay a demand for a grant before their local Legislative Councils in the next financial year. In the meantime, the Association applied to the Government of India for a non-recurring grant of Rs. 20,000 to enable it to tide over the period until the local Governments' grants were received and the Service to be carried on without a reduction of cadre in the current year. This appeal again met with no success. The Association was again reminded that the Government of India would not concern itself with the Women's Medical Service. On this occasion, however, they added " the whole question of the propriety or otherwise of central revenues being expended on subjects such as the maintenance of the Women's Medical Service, which primarily benefits the provinces, will come within the purview of the Indian Statutory Commission ". This statement affords the Association's justification for laying its case before the Commission.

Need for a properly organised service of female doctors.—The female population of British India may be estimated to be about 120 million. As far as can be ascertained there are about 400 women doctors working in India with registerable qualifications. Of these, 42 are in the Women's Medical Service under the Countess of Dufferin's Fund, and 15 in the junior branch of that service and in the training reserve. About 90 are working under provincial Governments in Local Fund hospitals. Possibly 150 are working under Missionary Societies and something over 100 are in private practice. There is therefore roughly one qualified female doctor for every 300,000 of the female population in British India.

The existence of the purdah system makes the need for women doctors in India far greater than in other countries. It is a matter of common knowledge that the proportion of deaths at child-birth is notoriously high, and the ratio of infant mortality is deplorable. No large improvement in this matter can be expected until there is a far greater supply of medical practitioners whom the Indian will consent to call in to treat his women folk. Apart from maternity, gynæcological and ordinary medical cases there is a pressing need for qualified doctors to specialise in the vast field of research in female complaints and to fill the professorial appointments in medical colleges, and schools for women. One of the chief sources of supply at present in India of qualified women doctors is the Lady Hardinge Medical College and Hospital at Delhi. Eight of the most important teaching posts of this College are filled by women doctors recruited for the Women's Medical Service by the Countess of Dufferin's Fund. It cannot be questioned that these professors, together with other members of the Women's Medical Service who are teaching in medical schools, are doing work of an all-India nature for which no individual province can be expected to take the responsibility.

The National Association feels, and feels very strongly, that this is a matter with which the Government of India should concern itself very seriously.

Apart from its subsidy of Rs. 3,70,000 for the Women's Medical Service the Government of India does nothing to supply women doctors for the people. This is left to the local bodies and charitable institutions who are able to touch merely the fringe of the problem. The matter is one that cannot be left entirely to local Governments. Not only is a province in India too small a unit in which to organise a self-contained service, but provincial resources

are limited, and it is impossible to expect the provinces to inaugurate their own services of medical women; if they did they could not afford to pay the members of the service adequately, and the standard of efficiency would be dangerously low.

The first attempt to induce the Government of India to create an Indian Medical Service of women was made nearly 20 years ago. The necessity for such a step is far more obvious now than it was then. From the result of the various appeals made to the Government of India for financial assistance in recent years it appears to the Council of the Countess of Dufferin's Fund that so long as the present constitution lasts and the subject of "Medical" remains a provincial transferred subject, the Government of India will not concern itself with the matter, and will be content to leave the Fund to face the problem with its wholly inadequate resources. On the other hand, the Council feels that little can be expected towards the solution of the problem from the provincial Ministers. For obvious reasons they have to pursue a policy of economy. The standard of women doctors in the provinces is not what it should be. Money is spent on the promotion of the indigenous systems of medicine, and hospitals are built without fully qualified women to take charge of them.

It is also necessary to point out that there are large and important areas in British India, such as the North-West Frontier Province and the provinces of Delhi and Coorg, which are under the direct administration of the Government of India. The policy of the National Association is to make these areas its special care, but it can do very little when it is at the same time faced with the problem of supplying women for professorial appointments and for the charge of female hospitals in Governors' provinces.

The claim of the Council is that the Women's Medical Service for India should be put on a proper basis and that if, as the Government of India claim, they are precluded from doing this by the Devolution Rules under the Government of India Act, then the Council would strongly urge the amendment of those Rules so as to bring the subject of medical relief by women for the women of India within the category of central subjects so that the Government of India may no longer be precluded, as it claims to be at present, from increasing the subsidy which it gives to the Women's Medical Service.

(Sd.) H. MONCRIEFF SMITH, Kt., C.I.E.,

Chairman,

The National Association for Supplying Medical Aid by Women to the Women in India.

APPENDIX VI.

INDIA'S PARLIAMENT.

ELECTION OF NOVEMBER, 1926.

Upper Chamber.
(Council of State.)
Five-year term.

President: Sir Henry Moncrieff Smith (Nominated by Viceroy).

Representation.	
Elected	34
Nominated	26
(Officials—18, others—8.)	
Total	60

Date of the next elections is uncertain, as the statutory commission, headed by Sir John Simon, is reconsidering Indian Constitution.

Lower Chamber.
(Legislative Assembly.)
Three-year term.

President: V. J. Patel (Swarajist).
(Elected by the Assembly.)

Parties.	Representation.
Swarajist	38
Nationalist	18
Central Muslim party and non-party	22
Independents	13
Europeans	12
Nominated	41
(Officials—26, others—15.)	
Total	144

Party Programmes and Leaders.

The parties of India fall naturally into two main classes, those which support the Government and those which do not. Their important differences lie in the methods which they advocate in obstructing or in sustaining the constituted authorities.

SWARAJIST: The Swarajists are opposed to the present constitution. They question the right of Parliament to determine further stages of advance, and desire to attain Swaraj or Home Rule by obstructing to such an extent as to make the working of the present constitution impossible.

Leaders: Pandit Moti Lal Nehru, Mr. Srinivasa Iyengar.

NATIONALIST PARTY: The Nationalists regard Dyarchy as unworkable, but their policy is not total support of the Government. They desire to attain Swaraj or Home Rule as early as possible but only by constitutional means.

Leaders: Pandit Madan Mohan Malaviya, Mr. M. R. Jayakar.

NON-PARTY: As the name signifies these members have not formed any particular party and vote on each matter as they like—sometimes with and sometimes against the Government.

INDEPENDENTS: The Independents desire progress, but they do not believe in consistent obstruction. Sometimes they support the Government, sometimes they oppose it.

Leaders: M. A. Jinnah, Sir Purshotamdas Thakurdas.

EUROPEANS: The Europeans believe in steady orderly progress and generally support the Government.

Leader: Sir D'Arcy Lindsay.

NOMINATED: The nominated members have no definite programme. They are nominated to secure the representation of particular interests. The officials naturally support the Government. Though the majority of the others support the Government, on certain questions some of them take up an independent line of their own and vote with one of the popular parties.

Leader: Sir James Crerar (Leader of the House, Home Member of Council).

MUSLIM PARTY: The Central Muslim Party is conservative in outlook and is pledged to national progress to Home Rule which shall include full safeguards for the existing rights and privileges of the Muslim community and reasonable opportunity for their continued development in the future.

Leaders: Sir Zulfiqar Ali Khan, Sir Abdul Qaiyum.

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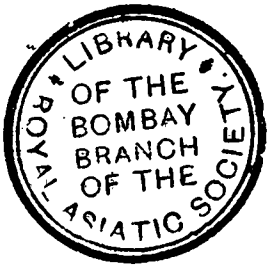

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